23 JUL 1938

# Urban District and Port of Barry

## PUBLIC HEALTH DEPARTMENT

# Annual Report

## 1937

**E. I. DAVIES, M.B., B.S. (Lond.), D.P.H.,**
*MEDICAL OFFICER OF HEALTH,*
*SCHOOL MEDICAL OFFICER,*
*MEDICAL SUPERINTENDENT to the*
*COUNCIL'S HOSPITALS.*

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BARRY:
E. J. & I. J. LLEWELLIN

1938

# BARRY URBAN DISTRICT COUNCIL.

Chairman: Mr. D. J. BOON, J.P.
Vice-Chairman: Mr. C. B. GRIFFITHS, O.B.E.

Members:

Mr. W. T. ACE, J.P.
Mr. H B. ADAMS.
Mr. S. S. AWBERY, J.P.
Mr. W. H. BUTCHER.
Mr. D. J. EVANS.
Mr. R. G. COOK.
Mr. C. B. GRIFFITHS, O.B.E.
Mr. H. E. HOLBROOK.
Mrs. M. HOLLAND.
Mr. D. T. HOWE, J.P.
Mr. J. IRELAND.
Mr. J. A. JONES.
Dr. P. W. KENT.
Mr. W. R. LEE, J.P.
Mr. J. T. MASLIN.
Mr. J. R. LLEWELLYN, J.P.
Mr. F. A. SHARP.
Mrs. D. REES.
Mr. H. THOMAS.
Mr. A. R. M. ROOK.

Clerk to the Council: Mr. T. D. HOWELLS.

## BARRY PORT HEALTH AUTHORITY.

Members:

All the Members of the Urban District Council.

Clerk to Port Health Authority: Mr. T. D. HOWELLS.

# COMMITTEES.

## EDUCATION COMMITTEE.

Chairman: Mr. D. J. EVANS.
Vice-Chairman: Mr. E. T. GRIFFITHS, M.A., L.es.L.

All the Members of the Council, and the following co-opted Members:—

Mr. G. CHILDS.
Mr. E. T. GRIFFITHS, M.A., L.es.L.
Mr. J. LLOYD-JONES.
Mr. R. G. RUSSELL.

Secretary of Education: Mr. E. G. HABAKKUK, M.Sc.

## HEALTH COMMITTEE, ALSO PORT HEALTH COMMITTEE.

Mr. W. H. BUTCHER (Chairman).
Mr. W. T. ACE, J.P.
Mr. D. J. BOON, J.P.
Mrs. M. HOLLAND.
Mr. C. B. GRIFFITHS, O.B.E.
Mr. W. R. LEE, J.P.
Mr. D. T. HOWE, J.P.
Dr. P. W. KENT.
Mr. F. A. SHARP.
Mrs. D. M. REES.

## MATERNITY AND CHILD WELFARE COMMITTEE.

Mr. J. IRELAND (Chairman).
Mr. D. J. BOON, J.P.
Mr. J. T. MASLIN.
Mr. H. B. ADAMS.
Mr. D. EVANS.
Mr. J. A. JONES.
Mr. F. A. SHARP.
Mrs. M. HOLLAND.
Mr. W. H. BUTCHER.
Dr. P. W. KENT.

Co-opted Members:

Mrs. A. E. IRELAND.
Nurse MORGAN.
Mrs. M. J. McQUADE.
Mrs. S. J. ROWLAND.
Mr. W. H. CRUISE.

## HOSPITALS' COMMITTEE.

Mr. J. IRELAND (Chairman).
Mr. D. J. BOON, J.P.
Mrs. M. HOLLAND.
Mr. H. B. ADAMS.
Mr. F. A SHARP.
Mr. J. T. MASLIN.
Mr. J. A. JONES.
Mr. W. H. BUTCHER.
Dr. P. W. KENT.
Mr. D. EVANS.

## STAFF.

Medical Officer of Health and Superintendent of Hospitals:
E. I. DAVIES, M.B., B.S. (Lond.), M.R.C.S., L.R.C.P., D.P.H.
Also School Medical Officer and Port Medical Officer.

Deputy Medical Officer of Health:
J. B. S. MORGAN, M.B., B.Ch., B.Sc. (Wales), L.R.C.P., M.R.C.S., D.P.H.
*(Resigned August, 1937).*
Also Assistant School Medical Officer and Deputy Port Medical Officer.
W. E. THOMAS, M.B., B.Ch., B.Sc. (Wales), M.R.C.S., L.R.C.P., D.P.H.
*(Appointed 1/9/37).*

D. COWIN, M.B., Ch.B., L.D.S., R.C.S. (Dental Surgeon to M. & C.W. and School Dentist).

N. L M. READER, M.S. (Lond.), F.R.C.S. (Eng.) Surgeon to Accident and Surgical Hospital, and M.O. i/c of Ante Natal Clinic).

P. T. BRAY, M.B., B.Ch., B.Sc. (Wales) (Resident Surgical Officer).

G. SIXSMITH, L.M.S.S.A. (House Surgeon).

SYBIL M. MORGAN, M.R.C.S., L.R.C.P.
(Medical Officer, Gynaecology Clinic, *Part-time*).

Sanitary Staff. Urban:
Chief Inspector: T. L. SPICKETT.
Inspectors: T. F. HALLIDAY, D. M. EVANS.

Sanitary Staff. Port:
Chief Inspector: C. HOCKLEY.
Three Assistant Inspectors.

Meat Inspector:
REG. WM. HALL, M.R.C.V.S.

Health Visitors and School Nurses:
Miss E. C. THOMAS, Miss S. E. GREENE, Miss A. C. REID,
Miss E. HANKIN, Miss H. PARR.

Dental Attendant: Miss D. V. LEWIS.

Gynaecology Clinic, *Part-time:* Mrs. M JOHN.

Matrons:
Miss E. BRIDGES—Accident and Surgical Hospital.
Miss E. A. MEREDITH—Infectious Diseases Hospital.

Clerical Staff:
Chief Clerk: W. T. WATHAN.
Four Clerks.

Rat Catcher: H. PROSSER.

PUBLIC HEALTH DEPARTMENT,
WOODLANDS ROAD,
BARRY.

*To the Chairman and Members of the Barry Urban District Council.*

Mr. Chairman, Ladies and Gentlemen,

I have pleasure in submitting to you my Annual Report for the year 1937.

This Report includes the Annual Health Report based on Circular 1650, School Medical Officer's Report in the form suggested by the Board of Education, and the work of the Port Health Authority as indicated in Memorandum 204 S/A.

This is the third Annual Report I have prepared, but the forty-ninth Report issued on the work of the Town and Port of Barry.

Subjects of interest in this Report will be found under the following headings:—

(1) Vital statistics.
(2) Costing, Accident and Surgical Hospital, including conditions of service of Nursing Staff.
(3) Decline in the Population.
(4) Midwives Act, 1936.
(5) Tuberculosis.
(6) Typhoid Fever.
(7) Swimming Pool Purification. Ozone versus Chlorine.
(8) Nutrition in School Children.
(9) Port Sanitation, including Hygiene of Crew's Spaces, and Measures against Rodents.

I have attempted to shed light on a few public health problems, but perhaps I have by contrast served merely to accentuate the darkness of our surroundings.

In October, the National Campaign to encourage the wider use of the Health Services began, and the Council actively co-operated in this Movement. The local newspapers featured the Campaign, and their Editors courteously inserted propaganda articles written by the Medical Officer of Health. As this Campaign is continued into 1938, a full account cannot be given in the Report for this year.

The problem of Mental Hygiene unfortunately does not appear in the propaganda of the National Health Campaign. This, in my opinion, at the present time is the greatest of all problems before the medical profession. It would be well to exchange bottles of medicine for an equal number of doses of "happiness" as a cure of much of the cause of national sickness.

A Table showing what an average rate-payer contributes towards the Public Health Services of the Town appears below the Table of Expenditure. This Table shows that a Barry family occupying a house of the rateable value of £20 at present spends £1 13s. 7½d. (out of the rates) per annum for the various Health Services. These Services comprise the general sanitary supervision of the Town; the control of infectious diseases and their free diagnosis and treatment in hospitals; also protection, as far as it is possible, against the importation of dangerous infectious disease through the port. Further, the rate-payer may avail himself of the School Medical and Maternity and Child Welfare Services, also complete surgical and accident treatment at our Accident and Surgical Hospital at a small cost, and in necessitous cases free.

The vital statistics show (1) a further fall in the birth-rate, a comment on which will be found in the body of this Report; (2) a slight rise in the death-rate—this is to be expected, being due to the increased number of elderly people; (3) a low figure for infant mortality.

I wish to thank members of the Council for their kindness and support, and the Officers of the Health and other Departments for their continued assistance and co-operation.

I am,

Your obedient servant,

E. I. DAVIES,
*Medical Officer of Health.*

## EXPENDITURE, 1937 - 1938.

| SERVICE. | Approximate Expenditure. | Income (Including Government Grant). | Net Cost of Service. | Rate in £. |
|---|---|---|---|---|
| | £ | £ | £ | s. d. |
| 1. School Medical Service .... .... | 2,870 | 1,440 | 1,430 | 1.72 |
| 2. Maternity & Child Welfare Service | 3,166 | 1,262 | 1,904 | 2.29 |
| 3. Small Pox Hospital .... .... | 411 | 207 | 204 | 0.25 |
| 4. Infectious Diseases Hospital .... | 3,907 | 1,419 | 2,488 | 3.00 |
| 5. Accident and Surgical Hospital .... | 9,311 | 615 | 8,696 | 10.47 |
| 6. Prevention of Diseases .... .... | 1,726 | 706 | 1,020 | 1.23 |
| 7. Destruction of Rats and Mice .... | 24 | — | 24 | 0.03 |
| 8. Inspection of Shops .... .... | 90 | — | 90 | 0.11 |
| 9. Overcrowding Survey .... .... | 5 | — | 5 | 0.01 |
| 10. Other Health Services .... .... | 800 | — | 800 | 0.96 |
| 11. Port Sanitary Authority .... | 2,457 | 1,314 | 1,143 | 1.38 |
| Totals .... .... .... | 24,767 | 6,963 | 17,804 | 1 - 9.45 |

## RATEPAYER OCCUPYING HOUSE RATED AT £20 RATEABLE VALUE.

What he pays in rates for one year towards the Medical Services of the Town.

| SERVICE. | *Cost to Ratepayer.* £ | s. | d |
|---|---|---|---|
| School Medical Services .... .... .... .... .... .... | 0 | 2 | 8¼ |
| Maternity and Child Welfare .... .... .... .... .... .... | 0 | 5 | 8¼ |
| Hospitals (including the Small Pox, Infectious Diseases, and Accident Hospitals) .... .... .... .... .... | 1 | 0 | 4¾ |
| Prevention of Diseases.... .... .... .... .... .... .... | 0 | 0 | 5½ |
| Port Sanitation .... .... .... .... .... .... .... | 0 | 1 | 6 |
| General Health Administration .... .... .... .... .... .... | 0 | 2 | 10¾ |
| | £1 | 13 | 7½ |

# GENERAL HEALTH SERVICE.

## STATISTICS AND SOCIAL CONDITIONS.

AREA.—4,265.6 acres.

POPULATION.—

For the statistical purposes of this Report the Registrar General's mid-year 1937 estimate of 35,950 has been used.

Number of inhabited Houses (end of 1937) according to Rate Books—8,877.

RATEABLE VALUE.—£227,898. Sum represented by one penny rate—£537 2s. 1d.

CHIEF OCCUPATIONS OF THE INHABITANTS.—The inhabitants are largely employed at the Docks, which are mainly used for the export of coal. The occupations are chiefly ship-repairers, boilermakers, fitters, coal-trimmers, coal-tippers, railway workers, millers, moulders and seamen.

These trades are susceptible to changes, and in many instances employment has become casual, but fortunately the health of the community has not been affected.

Barry is not only a coal exporting town but also a holiday centre. It is endowed with an exceptionally health-giving climate, also many natural beauties and amenities which have been well supplemented by public enterprise. The climate is temperate and equable, but very bracing. There is an abundance of sunshine, the yearly average being 1,500 hours. Its reputation as a seaside resort is firmly established. Besides its own places of historical and antiquarian associations, the immediate neighbourhood is full of interest, there being a wealth of old world villages and ancient castles in the area.

## EXTRACTS FROM VITAL STATISTICS.

| | Total. | M. | F. | | |
|---|---|---|---|---|---|
| Live Births Legitimate | 482 | 246 | 236 | Birth Rate per 1,000 of the estimated resident population | 13.76 |
| Live Births Illegitimate | 13 | 8 | 5 | | |
| Stillbirths | 32 | 18 | 14 | Rate per 1,000 total (live and still-births) births | 60.72 |
| Deaths | 480 | 264 | 216 | Death Rate per 1,000 of the estimated resident population | 13.35 |
| Deaths from diseases and accidents of pregnancy and childbirth | | | | from sepsis | 5.69 |
| | | | | from other causes | 1.89 |

Death rate of Infants under one year of age:—

| | |
|---|---|
| All infants per 1,000 live births | 59.0 |
| Legitimate infants per 1,000 legitimate live births | 60.16 |
| Illegitimate infants per 1,000 illegitimate live births | 0.0 |
| Deaths from Measles (all ages) | 1 |
| Deaths from Whooping Cough (all ages) | 1 |
| Deaths from Diarrhoea (under 2 years of age) | 3 |

VITAL STATISTICS.—Table I shows the vital statistics of the district during the years 1933 to 1937.

## TABLE I.

| Year. | Population estimated to Middle of each Year | Births. | | Total Deaths Registered in the District. | | Transferable Deaths Non-residents registered in the District. | Transferable Deaths of Residents not registered in the District. | Nett Deaths belonging to the District. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nett. | | | | | | Under 1 year. | | At all ages. | |
| | | No. | Rate. | No. | Rate. | | | No. | Rate per 1,000 nett Births. | No. | Rate. |
| 1937 | 35,950 | 495 | 13.76 | 374 | 10.4 | 95 | 106 | 29 | 59.0 | 480 | 13.35 |
| 1936 | 36,680 | 560 | 15.26 | 307 | 8.36 | 41 | 117 | 26 | 46.4 | 424 | 11.55 |
| 1935 | 37,410 | 606 | 16.19 | 354 | 9.46 | 13 | 110 | 31 | 51.15 | 451 | 12.05 |
| 1934 | 37,938 | 609 | 16.05 | 384 | 10.12 | 14 | 86 | 41 | 67.32 | 456 | 12.02 |
| 1933 | 38,330 | 624 | 16.28 | 388 | 10.12 | 8 | 102 | 32 | 51.2 | 482 | 12.57 |

CAUSES OF DEATH.—Table II shows the classification of the causes of death as recorded by the Registrar General

## TABLE II.

| | CAUSES OF DEATH. | | MALES. | FEMALES. | Rate per 1,000 Population. |
|---|---|---|---|---|---|
| | All Causes | | 264 | 216 | 13.35 |
| 1. | Typhoid and Paratyphoid Fevers | | — | — | — |
| 2. | Measles | | 1 | — | 0.0278 |
| 3. | Scarlet Fever | | — | — | — |
| 4. | Whooping Cough | | 1 | — | 0.0278 |
| 5. | Diphtheria | | 2 | 3 | 0.1391 |
| 6. | Influenza | | 7 | 2 | 0.2503 |
| 7. | Encephalitis Lethargica | | — | 1 | 0.0278 |
| 8. | Cerebro-Spinal Fever | | 1 | — | 0.0278 |
| 9. | Tuberculosis of Respiratory System | | 17 | 13 | 0.8344 |
| 10. | Other Tuberculous Diseases | | 3 | 3 | 0.1668 |
| 11. | Syphilis | | — | — | 0.000 |
| 12. | General Paralysis of the Insane, Tabes Dorsalis | | 1 | 1 | 0.0556 |
| 13. | Cancer, Malignant Disease | | 32 | 32 | 1.7802 |
| 14. | Diabetes | | 2 | 4 | 0.1668 |
| 15. | Cerebral Haemorrhage, &c. | | 12 | 11 | 0.6397 |
| 16. | Heart Disease | | 67 | 54 | 3.3657 |
| 17. | Aneurisym | | 2 | 1 | 0.0834 |
| 18. | Other Circulatory Diseases | | 15 | 8 | 0.6395 |
| 19. | Bronchitis | | 4 | 5 | 0.2503 |
| 20. | Pneumonia (all forms) | | 17 | 15 | 0.8901 |
| 21. | Other Respiratory Diseases | | 4 | 1 | 0.1391 |
| 22. | Peptic Ulcer | | 2 | 2 | 0.1112 |
| 23. | Diarrhoea, &c. (under 2 years) | | 1 | 2 | 0.0834 |
| 24. | Appendicitis | | 2 | 3 | 0.1391 |
| 25. | Cirrhosis of Liver | | — | — | — |
| 26. | Other Diseases of Liver, &c. | | — | 1 | 0.0278 |
| 27. | Other Digestive Diseases | | 4 | 6 | 0.2781 |
| 28. | Acute and Chronic Nephritis | | 9 | 13 | 0.6119 |
| 29. | Puerperal Sepsis | | — | 3 | 0.0834 |
| 30. | Other Puerperal causes | | — | 1 | 0.0278 |
| 31. | Congenital Debility, Premature Birth, Malformations, &c. | | 11 | 3 | 0.3894 |
| 32. | Senility | | 6 | 8 | 0.3894 |
| 33. | Suicide | | 4 | 2 | 0.1668 |
| 34. | Other Violence | | 11 | 5 | 0.4450 |
| 35. | Other Defined Diseases | | 26 | 13 | 1.0848 |
| 36. | Causes ill-defined or unknown | | — | — | — |
| | Special Causes (included above):— | | | | |
| | Small Pox | | — | — | — |
| | Poliomyelitis | | — | — | — |
| | Polio-encephalitis | | — | — | — |
| | Deaths of Infants under one year | Total | 19 | 10 | — |
| | | Legitimate | 19 | 10 | — |
| | | Illegitimate | — | — | — |
| | Live Births | Total | 254 | 241 | 13.76 |
| | | Legitimate | 246 | 236 | — |
| | | Illegitimate | 8 | 5 | — |
| | Stillbirths | Total | 18 | 14 | 0.89 |
| | | Legitimate | 15 | 14 | — |
| | | Illegitimate | 3 | — | — |
| | Population | | | | 35,950 |

BIRTHS.—According to the Registrar General the births in Barry during 1937 numbered 495 (254 males and 241 females), this being 65 less than last year. The birth-rate was 13.76 as compared with 15.26 in 1936.

The illegitimate births registered during 1937 numbered 13 (8 males and 5 females).

From the weekly returns of the Local Registrar the total number of births amounted to 457 (231 males and 226 females).

THE FALLING BIRTH RATE.—The following article by the writer appeared in the local press under the heading "National Health Campaign":—

The present Campaign for physical fitness is to be greatly commended, but the efforts, however widespread, are not sufficient. The rearing of our future generation is the most important industry in Great Britain to-day, and therefore requires some form of financial subsidy by the State, such as is given to other industries. Looking after a large family is a whole-time job for a woman, and a skilled job too, so that a good income for carrying out the work of bringing up children is not a faddist's idea but simply sound sense. There are forty-five million people in Britain, of which approximately eleven million are housewives. By far the greatest single profession is that of housewife. There are eleven million children in the country, and this works out at one child to each housewife, obviously an extremely small average.

It is difficult to trace the definite beginning to any movement for social amelioration. Interest in the prevention of infant mortality was hastened by the decline in the birth rate which had fallen continuously from 35.5 in the period 1871—1875 to 29.3 in 1896—1900. The dread of over-population, which finds abundant expression in the writing of the Victorian economists, was prevalent, and was felt by many who had never even opened a book on economics. It seemed an easy, indeed an obvious way of explaining unemployment and other problems of poverty, to say there were too many people in the country.

This point of view, however, did not last long, and it was seen that a heavy population decline had some very unwelcome consequences. In theory there are four means of checking population decline:—(1) increase of fertility, (2) reduction of mortality, (3) restriction of emigration, and (4) promotion of immigration. Nos. 3 and 4 can be ruled out as impracticable, No. 3 being negligible, and (4) unpopular, not being within the scope of practical politics.

It is being increasingly realised in these days of hygienic reform and complex social legislation that ability to read critically reports dealing with mortality and sickness is required not only of medical men but of all educated citizens. It is well, therefore, to define both the birth rate and the fertility rate. The birth rate is the number of registered live births per 1,000 of the mean or mid-year population. So defined it is known as the crude birth rate and is usually reckoned on an annual basis. Fertility rate is the number of registered births in a year per 1,000 women of child-bearing ages. It is interesting to note that the birth rate for Barry in 1896 was 44.7 as compared with 29.4, the rate for England and Wales. In 1936 the birth rate for this town was 15.26, the national rate being 14.8., and the corresponding figures for 1937 being Barry 13.76, England and Wales 14.9. It will be seen from these figures that both the local and national rates have fallen tremendously. Many reasons are advanced for this decline. There is no doubt that it is in part due to the fact that the town contains a somewhat larger proportion of elderly people than formerly, also many of the young people have migrated to the more prosperous towns, who would otherwise now be bringing up families in Barry. At the same time, it is equally certain that much of the fall in the birth rate is due to the deliberate practice in the method of birth control. In this article I am not at present concerned with the ethics of birth control; a more useful study is one directed to the ascertainment of the cause of this family limitation.

There are three main schools of thought in the matter. The first group claims that mothers are hesitating before bringing children into the world of economic and social chaos, of wars, and rumours of wars. In a minority of cases this is no doubt true, but it is a small factor in the problem of the falling birth rate. The second reason is that the younger generation of to-day is too fond of pleasure to settle down to the responsibility of family life. In my opinion this reason counts for little in the general decline of the population. The third reason is due to the steady alteration in economic conditions. Wages have on the whole risen considerably, but so have the prices of food, clothing, and rents, and so has the general standard of living.

To sum up, though it is possible that there is a decline in general fertility, and allowing for a small section under the second reason, the decline in the birth rate is in the main due to deliberate and planned restriction for various economic reasons. To increase the birth rate, our national policy must be to provide economic inducements to parents, and the prospect of economic security for the children.

DEATHS.—The number of deaths for the year was 480, of this total 264 were males and 216 females. The death-rate from all causes was 13.35 per 1,000 population, compared with 11.55 for the previous year.

The deaths for all ages for the year were as follows:—

| | |
|---|---|
| Under one year | 29 |
| One and under two years | 8 |
| Two and under five years | 6 |
| Five and under fifteen years | 10 |
| Fifteen and under twenty-five years | 21 |
| Twenty-five and under forty-five years | 47 |
| Forty-five and under sixty-five years | 125 |
| Sixty-five and upwards | 234 |
| Total | 480 |

The number of deaths in each ward are shown as follows:—

| | |
|---|---|
| Cadoxton | 81 |
| Castleland | 64 |
| Court | 61 |
| Dock | 75 |
| High Street | 56 |
| Holton | 80 |
| Park | 63 |
| Total | 480 |

Of the 480 deaths, 436 were certified by registered medical practitioners, the District Coroner certified 43 deaths, and 1 death was uncertified.

The variation in the mortality from selected causes at all ages during the year can be conveniently followed in Table II.

INFECTIOUS DISEASES.—These, including tuberculosis, are dealt with in the part of the Report devoted specially to infectious diseases.

CANCER AND OTHER MALIGNANT DISEASES.—The Cancer death-rate for 1937 was 17.8 per 10,000 of the population as compared with a rate of 16.0 per 10,000 in 1936.

HEART DISEASE.—Deaths from this disease show a decrease, the death-rate in 1937 was 33.65 per 10,000 of population as against 34.89 per 10,000 for 1936.

BRONCHITIS.—The death-rate for 1937 was 2.50 per 10,000 of the population as compared with 1.36 for 1936.

## TABLE III.

Birth-Rate, Death-Rate, and Analysis of Mortality during the Year 1937.

| | Rate per 1,000 Total Population. | | Annual Death Rate per 1,000 Civilian Population. | | | | | | | | | Rate per 1,000 Births. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Live Births. | Still Births. | All Causes. | Enteric Fever. | Small Pox. | Measles. | Scarlet Fever. | Whooping Cough. | Diphtheria. | Influenza. | Violence. | Diarrhoea and Enteritis under 2 years. | Total Deaths under 1 year. |
| England and Wales.... .... .... | 14.9 | 0.6 | 12.4 | 0.0 | 0.00 | 0.02 | 0.01 | 0.04 | 0.07 | 0.45 | 0.54 | 5.8 | 58 |
| 125 Great Towns, including London .... | 14.9 | 0.67 | 12.5 | 0.01 | 0.00 | 0.03 | 0.01 | 0.04 | 0.08 | 0.39 | 0.45 | 7.9 | 62 |
| 148 Smaller Towns (Adjusted Populations, 25,000—50,000) .... .... | 15.3 | 0.64 | 11.9 | 0.00 | 0.00 | 0.02 | 0.01 | 0.03 | 0.05 | 0.42 | 0.42 | 3.2 | 55 |
| London .... .... .... .... | 13.3 | 0.54 | 12.3 | 0.00 | 0.00 | 0.01 | 0.01 | 0.06 | 0.05 | 0.38 | 0.51 | 12.0 | 60 |
| BARRY .... .... .... .... | 13.76 | 0.89 | 13.35 | 0.00 | 0.00 | 0.02 | 0.00 | 0.027 | 0.13 | 0.25 | 0.44 | 0.08 | 29 |

## GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

PUBLIC HEALTH STAFF.—A complete list of the Public Health Officers can be found in the front portion of this Report.

NURSING IN THE HOME.—*(a)* There are 2 Private Nursing Homes in the District for Maternity cases.

*(b)* General Nursing is carried out by the Barry District Nursing Association who visit any patient on being communicated with by the Doctor in attendance on the case.

LABORATORY SERVICE.—The following table shows the results of examinations of suspected specimens sent to the Cardiff and County Public Health Laboratory during the year.

### TABLE IV. BACTERIOLOGICAL EXAMINATIONS, 1937.

| Specimens. | Number. | Results. | |
|---|---|---|---|
| | | Negative. | Positive. |
| Suspected Diphtheria .... | 1,761 | 1,469 | 292 |
| Suspected Enteric .... | 24 | 16 | 8 |
| Suspected Ringworm .... | 3 | 1 | 2 |
| Suspected Tuberculosis .... | 89 | 77 | 12 |
| Other Examinations .... | 1 | 1 | — |
| Totals .... | 1,878 | 1,564 | 314 |

LEGISLATION IN FORCE.—A detailed statement of local Acts in force, also Bye-laws and Regulations operative in the district, appeared in my Annual Report for 1935.

## HOSPITALS.

(1) TUBERCULOSIS.—The Sully Hospital is maintained by the King Edward VII Welsh National Memorial Association, and accommodation is provided for 300 patients—150 Men and 150 Women. In addition, there are five Post-operative Recovery Beds and six beds for Sick Staff. Of the 300 beds, 250 are for cases of Pulmonary Tuberculosis and 50 for Pulmonary cases who have articular lesions.

The types of patients admitted can be divided into the following categories—

(1) Patients with acute limited disease, who, after a period of rest in bed, will improve sufficiently to be transferred to a Sanatorium; also the acute type that rapidly goes downhill.

(2) Patients with chronic moderately advanced disease but who will never be fit for a Sanatorium.

(3) Patients with far advanced disease.

(4) Patients with combined lesions, e.g., Lungs and Joints.

(5) Patients who need major operative interference—such as Thoracoplasty, etc.

(6) Patients with doubtful disease who are sent in for a period of "observation" for the purpose of establishing a diagnosis.

An account of the working of this Hospital can be found in the Annual Report of the Welsh National Memorial Association.

(2) MATERNITY.—No provision has been made locally for reception of maternity cases. The existing arrangements are working satisfactorily, and during the year the following cases were admitted to hospital for confinement either by reason of unsuitable home conditions or as complicated cases of pregnancy. The total number admitted during 1937 was 22, and may be classified as follows :—

| | |
|---|---|
| Unsuitable home conditions .... .... .... .... | 8 |
| Albuminuria .... .... .... .... .... .... | 2 |
| Eclampsia .... .... .... .... .... .... | 2 |
| Pyelitis .... .... .... .... .... .... .... | 2 |
| Rheumatic Heart and Dropsy .... .... .... .... | 1 |
| Prolonged and difficult labour .... .... .... .... | 7 |

(3) CHILDREN.—There is no local children's hospital. A small children's ward for accident and surgical cases is provided in the Council's Accident and Surgical Hospital.

(4) FEVER.—Cases of Scarlet Fever and Diphtheria are treated at the Isolation Hospital, Colcot Road, the number of beds available being 42.

During the year this hospital was in continuous use and at several periods was working at full pressure. The total number of cases treated being 267.

## SUMMARY OF CASES TREATED DURING 1937.

### TABLE V.

| DISEASE. | Remaining Dec. 31st, 1936 | ADMISSIONS. | | | | | | | | | | | | TOTALS. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | January. | February. | March. | April. | May. | June. | July. | August. | September | October. | November. | December. | Cases. | Deaths. |
| Scarlet Fever ... ... | 8 | 5 | 3 | 6 | 8 | 5 | 2 | 2 | 1 | 4 | 6 | 13 | 9 | 72 | — |
| ,, ,, (observation) ... | — | 2 | 1 | — | 1 | — | 2 | 1 | — | 1 | 1 | 1 | 1 | 11 | 1 |
| Diphtheria ... ... | 19 | 16 | 15 | 7 | 8 | 5 | 8 | 6 | 11 | 7 | 11 | 13 | 14 | 140 | 4 |
| ,, (observation) ... | — | 1 | 5 | 6 | 1 | 8 | 4 | 2 | 2 | 3 | 3 | 3 | 5 | 43 | 2 |
| Broncho Pneumonia ... | — | — | — | — | 1 | — | — | — | — | — | — | — | — | 1 | 1 |
| TOTALS ... | 27 | 24 | 24 | 19 | 19 | 18 | 16 | 11 | 14 | 15 | 21 | 30 | 29 | 267 | 8 |

(5) SMALL POX.—The Small Pox Hospital of 12 beds situated off the Weycock Road, has had no case for several years. This applies generally throughout the country. Small Pox evidently being a disease practically extinct. The question of continuing to keep an idle building of this kind should engage the immediate attention of the Council. In my opinion this Hospital could serve a far more useful purpose for other conditions of ill-health in view of the fact that the prevalence of variola in this country might be approaching an end, in a similar way to Cholera, Plague and Yellow Fever.

(6) ACCIDENT AND SURGICAL HOSPITAL.—The work performed at the Accident and Surgical Hospital (31 beds), Wyndham Street, is shown in the undermentioned tables.

IN-PATIENTS.

| | |
|---|---|
| Patients remaining in hospital on January 1st, 1937 .... .... .... | 22 |
| Patients admitted up to Dec. 31st, 1937.... | 798 |
| Total .... .... | 820 |
| Patients remaining in hospital, December 31st, 1937 .... .... .... | 31 |
| Patients discharged, cured or relieved .... | 756 |
| Patients died .... .... .... .... | 33 |
| Total .... .... | 820 |
| Total number of days spent in hospital .... | 9,516 |
| Average number of days per patient spent in hospital .... .... .... | 12.06 |

OPERATIONS.

| | |
|---|---|
| Major operations performed .... .... | 935 |
| Minor operations performed .... .... | 604 |
| Total .... .... | 1,539 |
| Operations for removal of Enlarged Tonsils and Adenoids .... .... | 171 |

ANAESTHETICS.

| | |
|---|---|
| General anæsthetics administered .... | 496 |
| Local anæsthetics administered .... | 204 |
| Spinal anæsthetics administered .... | 245 |
| Nitrous Oxide administered .... .... | 235 |
| Evipan .... .... .... .... | 23 |
| | 1,203 |

ROAD ACCIDENTS.

| | Residents. | Non-Residents. |
|---|---|---|
| Treated .... .... | 32 | 27 |
| Detained .... .... | 21 | 9 |
| Totals .... | 53 | 36 |

OUT-PATIENTS.

Total number of attendances in out-patient dept. .... .... 11,020

The waiting list continues, but has increased and approximates:—
31 men, 16 women, and 17 children, making a total of 64.

## COSTING, ACCIDENT AND SURGICAL HOSPITAL, INCLUDING CONDITIONS OF SERVICE OF NURSING STAFF.

Although the comparative cost per patient bed of this Hospital is high, it should be pointed out that there are several important factors which influence this rate. The hospital can be defined as an "Acute Surgical Hospital," by which is meant a hospital designed and equipped for first class surgical work. It is intended for patients whose condition, whether it be acute or chronic, calls for active surgical treatment. In the first place, pure surgical treatment is recognised as costly, compared with other treatment in hospitals. Surgical equipment, appliances and repairs are expensive items in the annual estimates. The factors influencing the cost of maintenance in a hospital are:—

(a) Percentage occupation of the available beds.
(b) Salaries and wages of Staff.
(c) Cost of provisions, drugs and dressings.
(d) Engineering and Works services (including wages).

(a) The percentage occupation of beds in the hospital is high, but is periodically affected by painting and repairs, wards in quarantine, etc.

(b) Salaries and Wages account for about 50 per cent. of the cost of the average hospital; in the Barry Hospital it is considerably less than this figure—approximately 40%.

(c) The cost of food excluding cooking and service is 17%, which is above the average for this item. This can be largely accounted for by the fact that the ratio of resident Staff (Medical, Nursing and Domestic) to the number of beds is very high.

Drugs, Dressings and Surgical appliances average 14% of the total cost—an item again considerably above the average.

(d) Approximately 18% of the average weekly cost per patient is expended on engineering and works services. This compares favourably with Costing Returns of Hospitals in general.

In addition to the actual number of In-patients, the figure on which Costing Returns are based, it should be noted that this includes the expense of treating over 4,000 persons seen in the Out-patient Departments.

This includes major and minor casualities, consultations, and also the cost of the X-Ray and Electro-Therapeutic Department.

The average length of stay in hospital is, obviously, of greater importance than the cost per patient bed, as from this figure the cost of treating a patient to completion can be arrived at. For example, the cost of treating each individual patient to completion at a hospital where the average length of stay is considerably above the general average, though the daily cost is comparatively low, may be substantially greater than at a hospital where the average length of stay is short, but the daily cost high. By this method of comparison, the intensity of work and the demands upon the Staff are shown in a more correct manner.

Towards the end of the year, the Council considered the question of the working hours and conditions of service of the Nursing and Domestic Staff at this hospital. As a result, in order to reduce their working hours to a forty-eight hour week, additional staff was recommended. The cost per patient week will therefore, inevitably, be higher for the year 1937-38

Detailed reports concerning the Councils Hospitals were submitted, and after considerable discussion the hours of all nurses under this Authority were reduced to a forty-eight hour week. This is in conformity with the present day standards and recommendations as laid down in the report of the "Lancet" Commission, The College of Nursing, and the National Association of Local Government Officers. It should be added that the Public Health Services were never more important than they are to-day. Nursing is a profession requiring a high degree of intelligence and devotion to duty. In the past women have sacrificed their health and strength in the cause of humanity with no hope of adequate reward. The Barry Council recently made beneficial changes both in the salaries and working conditions of their nursing staffs.

Finally, whilst on this question of hospital finance the solution no doubt lies in a unification on a Regional basis of the Voluntary and Municipal Hospitals in this Country.

## TABLE VI.

## CLASSIFICATION OF IN-PATIENTS DISCHARGED OR DIED IN HOSPITAL 1937.

| | Disease Groups. | Children (under 16 years of age). | | Men and Women. | |
|---|---|---|---|---|---|
| | | Discharged | Died. | Discharged | Died. |
| A | Acute Infectious Disease .... .... .... | — | — | 1 | — |
| B | Influenza .... .... .... .... .... | — | — | 2 | — |
| C | Tuberculosis—Pulmonary .... .... .... | — | — | — | — |
| | Non-Pulmonary .... .... | 2 | — | 1 | — |
| D | Malignant Disease .... .... .... .... | — | — | 13 | 3 |
| E | Rheumatism : 1. Acute .... .... .... | — | — | — | — |
| | 2. Non-Articular Manifestations of "Rheumatism" .... .... | — | — | — | — |
| | 3. Chronic Arthritis .... .... | — | — | 4 | 1 |
| F | Venereal Disease .... .... .... .... | — | — | — | — |
| G | Puerperal Pyrexia .... .... .... .... | — | — | — | — |
| H | Puerperal Fever .... .... .... .... | — | — | — | — |
| I | Other Diseases and Accidents connected with Child Bearing .... .... .... | — | — | — | — |
| J | Mental Diseases .... .... .... .... | — | — | — | — |
| K | Senile Decay .... .... .... .... .... | — | — | — | — |
| L | Violence .... .... .... .... .... | 34 | 1 | 95 | 6 |
| M | Disease of Nervous System and Sense Organs .... | 12 | 2 | 2 | — |
| N | ,, ,, Respiratory System .... .... | 3 | — | — | — |
| O | ,, ,, Circulatory System.... .... .... | — | — | — | — |
| P | ,, ,, Digestive System .... .... .... | 214 | — | 239 | 19 |
| Q | ,, ,, Genito-Urinary System .... .... | — | — | 64 | 1 |
| R | ,, ,, Skin .... .... .... .... | 15 | — | 21 | 1 |
| S | Other Diseases .... .... .... .... | 7 | — | 27 | — |
| T | Mothers and Infants Discharged .... .... | — | — | — | — |
| | Totals .... .... .... | 287 | 3 | 469 | 30 |

AMBULANCE FACILITIES.—The Council are in possession of two ambulances, including a new and up-to-date ambulance for the removal of accident and surgical cases. The other is used for the removal of infectious diseases to the various Isolation Hospitals for which the Council have made provision. Details of the journeys will be found in the undermentioned table.

TABLE VII.

| Name of Service. | Number of Journeys within the Barry Area. | Number of Journeys outside the Barry Area. | Totals. |
|---|---|---|---|
| Public Health Service .... .... | 292 | 9 | 301 |
| School Medical Service .... .... | 305 | 8 | 313 |
| Maternity and Child Welfare Service | 182 | 18 | 200 |
| Accident and Surgical Hospital .... | 1,350 | 59 | 1,409 |
| Infectious Diseases Hospital .... | 931 | 15 | 946 |
| Small Pox Hospital .... .... | 15 | — | 15 |
| Port Sanitary Authority .... .... | 71 | 25 | 96 |
| Miscellaneous .... .... .... | 159 | — | 159 |
| Totals .... .... | 3,305 | 134 | 3,439 |

CLINICS AND TREATMENT CENTRES.—Table VIII shows the Clinics and Treatment Centres established in the area.

TABLE VIII.

| Centres. | Where Situate. | Accommodation. | By whom provided. |
|---|---|---|---|
| M. & C.W. Centres.<br>1. Barry Dock .... | Public Health Centre, Woodlands Road, Barry Dock .... | Consulting Room, Nurses' Room, Waiting-Room, Perambulator Shed and Lavatory .... | Barry Urban District Council. |
| 2. Barry Island .... | Friars Road, Barry Island .... | Three Rooms and Perambulator Shed, Lavatory | |
| School Clinic.<br>1. Barry Dock .... | Public Health Centre, Woodlands Road .... | Consulting Room, Nurses' Room, Waiting Room. Dental Clinic, Recovery Room, Eye Clinic, Offices and Storeroom | Barry Education Committee. |
| 2. Barry Island .... | Friars Road, | See M. & C.W. Centre .... | |
| Tuberculosis Centre .... | 28, Dock View Road, Barry Dock .... | Consulting Room and Waiting Room .... | Welsh National Memorial Association. |
| Treatment Centre for Venereal Diseases .... | Public Health Centre, Woodlands Road, Barry Dock .... | Consulting Room, Attendants' Room, Treatment Room, and Waiting Room, Lavatories .... .... | Glamorgan County Council. |
| Ante Natal Clinic .... | Buttrills Estate, Barry Dock .... | Consulting Room, Nurses' Room, Waiting Room .... | Barry Urban District Council. |
| Gynaecological Clinic .... .... | Buttrills Estate, Barry Dock .... | Consulting Room, Nurses' Room, Waiting Room .... | Barry Urban District Council. |

## MATERNITY AND CHILD WELFARE.

*(a)* INFANTILE MORTALITY.—There were 495 births during the year, and 29 deaths of children under one year, resulting in an infantile mortality rate of 59.0 per 1,000 births registered, as compared with 46.4 for 1936.

The causes of death of children under one year are shown in Table IX.

Of the 29 infant deaths 8 occurred during the first week of life, and 9 between the first and fourth weeks.

### TABLE IX.

1937. Nett deaths from stated causes at various ages under 1 year of age.

| Causes of Death. | Under 1 week. | 1-2 Weeks. | 2-3 Weeks. | 3-4 Weeks. | Total Number 4 Weeks. | 4 Weeks and under 3 Months | 3 and under 6 Months. | 6 and under 9 Months. | 9 and under 12 Months. | Total Deaths under 1 Year. |
|---|---|---|---|---|---|---|---|---|---|---|
| All causes: Certified .... .... | 8 | 3 | 4 | 2 | 17 | 2 | 5 | 4 | 1 | 29 |
| All causes: Uncertified .... .... | — | — | — | — | — | — | — | — | — | — |
| Asphyxia due to overlaying .... .... | — | — | 1 | — | 1 | — | — | — | — | 1 |
| Broncho Pneumonia .... .... .... | — | 1 | — | — | 1 | — | 3 | 1 | 1 | 6 |
| Convulsions .... .... .... .... | — | — | — | — | — | — | 1 | 1 | — | 2 |
| Gastro Enteritis .... .... .... .... | — | — | — | — | — | 1 | — | 1 | — | 2 |
| Inanition .... .... .... .... .... | 1 | — | — | — | 1 | — | — | — | — | 1 |
| Infantile Eczema .... .... .... .... | — | — | — | — | — | — | 1 | — | — | 1 |
| Marasmus .... .... .... .... .... | — | — | — | — | — | — | — | 1 | — | 1 |
| Prematurity .... .... .... .... | 6 | 2 | 3 | 1 | 12 | — | — | — | — | 12 |
| Rachischisis .... .... .... .... | — | — | — | 1 | 1 | — | — | — | — | 1 |
| Spina Bifida .... .... .... .... | 1 | — | — | — | 1 | — | — | — | — | 1 |
| Whooping Cough .... .... .... .... | — | — | — | — | — | 1 | — | — | — | 1 |
| Totals .... .... | 8 | 3 | 4 | 2 | 17 | 2 | 5 | 4 | 1 | 29 |

Nett Births
Total .... .... 495
Legitimate .... 482
Illegitimate .... 13

Nett Deaths under one year of age
Total .... .... .... 29
Legitimate Infants .... 29
Illegitimate Infants .... —

Stillbirths
Total .... .... .... 32
Legitimate .... .... 29
Illegitimate .... .... 3

*(b)* NOTIFICATION OF BIRTHS.—During the year 475 live births (244 males and 231 females) and 29 stillbirths (16 males and 13 females) were notified under the provisions of the Notification of Birth Acts.

The midwives notified 464 live births and 29 stillbirths, whilst parents and doctors notified 11 live births.

## MIDWIVES ACT, 1936.

The Midwives Act, 1936, came into operation on 31st July, 1936, and the schemes of local supervising authorities for giving effect thereto had to be put into operation not later than 30th July, 1937, unless the Minister of Health allowed longer periods in particular cases.

The following are extracts from two reports on this Act supporting my view that Child Welfare Authorities should be delegated powers for the Administration of the Midwives Acts.

The Act amends the Midwives Acts, 1902, 1918 and 1926, and brings into being a salaried service of midwives in the hope that with such a service there will come a reduction in Maternal Mortality and Morbidity. So far as the provisions go the " explanatory and financial memorandum " prefacing the Act gives interesting and useful detail with regard to the main purposes of the Act, and the manner of securing improvement in the standard of " domiciliary midwifery in England and Wales by establishing an adequate service of salaried midwives." In other words it places an obligation on each local supervising authority to secure an adequate service within its area, provides for an exchequer grant towards the cost of the new service and deals with other related matters. This Act was the outcome of a report issued in 1935 by the Joint Council of Midwifery directing attention to the inadequate remuneration obtained by midwives, and recommending that a salaried service of whole-time midwives should be introduced.

## COUNTY SCHEME FOR SALARIED MIDWIFERY SERVICE.

Introduced—30th July, 1937.

| a) District.<br>(b) Population<br>(c) Births (1935). | No. of Midwives resident in area. | | Total. | Approximate Ages. | | Suggested Centres for salaried Midwives. (Cases attended by Midwives during 1935 shown in brackets) | No. of Permanent Midwives suggested for area. | No. of Permanent Relief Midwives necessary. | General Remarks also suggested arrangements for relief work, i.e., off duty periods (excluding annual holidays), emer-gencies, post graduate courses, etc. |
|---|---|---|---|---|---|---|---|---|---|
| | Trained. | Un-trained. | | Age Group. | No. | | | | |
| a) Barry Urban<br>b) 37,410<br>c) 606 | 18 | 4 | 22 | 25—30 | 1 | Barry Town | 2 | — | The Barry Dock Relief Midwives would do relief work for the whole area. |
| | | | | 31—40 | 2 | Barry Dock (561) | 2 | 2 | |
| | | | | 41—50 | 5 | Barry Island | — | — | |
| | | | | 51—60 | 7 | Cadoxton | 2 | — | |
| | | | | over 60 | 7 | | | | |
| | | | | | | Totals - | 6 | 2 | |

In their proposed scheme the number of permanent midwives suggested for the Urban District of Barry is six plus two permanent relief midwives. This is based on the population of Barry as 37,410. The number of births for 1935 was 606. No doubt the number of midwives allocated to Barry is based on the assumption that a whole-time midwife is capable of attending the maximum number of cases of 80 per annum, which means that they would be capable of attending 480 cases. This leaves an average of approximately 100 cases which would be dealt with by private midwives, Nursing Homes, Maternity Hospitals and Maternity Wards in General Hospitals.

After careful consideration of their Scheme in comparison with other Urban Districts of similar population I agree that the number of salaried midwives, plus relief midwives, is sufficient for the needs of this town. My only criticism is this, that the County Council have not delegated the local supervision of midwives to the local Medical Officer of Health. I say this for several reasons. Under the Maternity and Child Welfare Act, 1918, as consolidated by the Public Health Act, 1936, Sections 200—205, certain local authorities carry out a complete Maternity and Child Welfare Scheme which includes the following:—

1. Arrangements for the local supervision of midwives.
2. Arrangements for—
   (a) An Ante-natal clinic for expectant mothers.
   (b) The home visiting of expectant mothers.
   (c) A Maternity Hospital or beds at a hospital in which complicated cases of pregnancy can receive treatment.
3. Arrangements for—
   (a) Such assistance as may be needed to ensure the mother having skilled and prompt attendance during confinement at home.
   (b) The confinement of sick women, including women having contracted pelves or suffering from any other condition involving danger to the mother or infant, at a hospital.
4. Arrangements for—
   (a) The treatment in a hospital of complications arising after parturition, whether in the mother or in the infant.
   (b) The provision of systematic advice and treatment for infants at a baby clinic or infant dispensary.
   (c) The continuance of these clinics and dispensaries so as to be available for children up to the age when they are entered on a school register.
   (d) The systematic home visitation of infants and children not on a school register.

It will be noted from the above Scheme that the whole of the arrangements, with the one exception of the local supervision of the midwives, is carried out by the local Welfare Council, i.e., the Maternity and Child Welfare Committee of the Barry Urban District Council. There is a distinct tendency for County Councils in general and the Glamorgan County Council in particular, to fail to delegate supervisory powers to their Urban District Councils who are already employing whole-time Medical Officers of Health. One of the conditions of sound and efficient municipal government is (1) complete autonomy in local affairs, (2) an area of manageable size not too small to be self-maintained and not too large to be unwieldy.

Under the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926, it is the local Medical Officer of Health who has to arrange and deal with the facilities required in the prescribed form of notification. Surely an authority that is competent to carry out a scheme for (1) ante-natal supervision and treatment, (2) the treatment in hospitals of complicated cases of pregnancy, and (3) post-natal advice and treatment of the mother, also the complete control of child life from birth to school leaving age is entitled to show resentment at the fact that the only function left, viz., " that of supervising midwives,' should be in the hands of an authority out of all touch with local requirements. What purpose is served in constantly advocating the combination of districts under a whole-time Medical Officer of Health, if at the same time the various Acts of Parliament make a complete Health unit impossible. No work can hope to succeed where dual control is exercised, this applies especially in the medical profession. The efforts of autonomous areas are baulked because of a desire by supervising authorities in this and other matters to retain to themselves duties that can better be carried out by the district Medical Officer.

I should suggest that if the population of the Urban District of Barry is not large enough to create a complete system of preventive and curative medicine it is high time we rolled up the map of this and every such County into districts of sufficient population to be self-contained.

I note that the Minister of Health has recently stated in Parliament that a number of either non-county boroughs and urban districts are supervising authorities under the Midwives Act.

In conclusion, I am of opinion that the Maternity and Child Welfare Committee should urge the County Council to delegate the necessary powers under the Midwives Act to Welfare Authorities who employ whole-time Medical Officers of Health, otherwise to appeal to the Ministry of Health on the matter.

In the first report to the Maternity and Child Welfare Committee the only criticism made was that the Glamorgan County Council have not delegated the supervision of midwives to the local Medical Officer of Health.

In the light of further knowledge gained by discussion with other Medical Officers, it would appear to be desirable to give consideration to charging a fee other than 30/- for attendance at a confinement. The local fee at present payable is £2 2s. 0d., except in necessitous cases, when the fee is £1 15s. 0d. The Midwives Union is of opinion that the local fee should be £2 2s. 0d. The advantages of charging this fee instead of 30/- would be—

(a) It would give satisfacton to the independent midwives who continue in private practice.

(b) It would encourage the midwives at present in practice to continue and thus reduce the compensation payable.

(c) It would give time for the effects to be seen of the new Municipal Midwifery Service.

The only disadvantage would appear to be the excess cost of 12/- to the woman receiving attendance.

It will be noticed that nothing in the Act precludes a midwife from carrying on private practice, so that private practising midwives may remain after the Act has been put into operation. Save in residential areas, however, it is generally anticipated that this type of midwife will rapidly cease to practise, either becoming a unit of the new service or retiring with compensation as she will be entitled to under the new Act.

The midwives who are likely to be employed in this district may be divided into three groups, (1) the C.M.B. Certificate only, with limited experience, (2) considerable experience in the practice of the profession in addition to the C.M.B. Certificate, and (3) three years general training in general nursing and State Registered Certificate in addition to the C.M.B. Certificate. These factors will no doubt be taken into consideration in deciding upon a scale of salaries for midwives should your Authority be given powers of delegation.

The general conditions of service submitted in the County Council's Draft Scheme appear to be satisfactory. Owing to the short time available to prepare this report, further observations, objections and criticisms will be made. This report is not intended to be final and complete. but taken in conjuction with the comments on the Midwives Act in the first report, it is hoped that the Council have been given sufficient facts and material on which to make an appeal to the Ministry of Health at an early date. It is now a matter of supreme urgency that our proposals be put before the Minister within the next few days.

The Minister of Health after receiving a Deputation and carefully considering the above report refused to make the Barry Council the Supervising Authority under the Midwives Acts. The reason given being the small number of cases in the district attended each year by midwives in the homes of patients within the area, and the number of salaried midwives would be too few to justify the establishment of a separate service for Barry.

Home Visiting of Children under School age. The following table shows the results of 3,445 visits to children under five years of age:—

TABLE XI.

| Age. | Number Visited. | Number Defective. | Referred Own Doctor. | Referred to Clinic. |
|---|---|---|---|---|
| 15 Months .... .... .... | 449 | 54 | 18 | 36 |
| 18 Months .... .... .... | 393 | 40 | 11 | 29 |
| 21 Months .... .... .... | 401 | 43 | 14 | 29 |
| 2 Years .... .... .... | 370 | 44 | 13 | 31 |
| 2½ Years .... .... .... | 433 | 50 | 17 | 33 |
| 3 Years .... .... .... | 407 | 34 | 8 | 26 |
| 3½ Years .... .... .... | 423 | 35 | 14 | 21 |
| 4 Years .... .... .... | 314 | 29 | 6 | 23 |
| 4½ Years .... .... .... | 244 | 19 | 5 | 14 |
| 5 Years .... .... .... | 11 | — | — | — |
| Totals .... .... | 3,445 | 348 | 106 | 242 |

*(e)* MATERNITY AND CHILD WELFARE CENTRES.—Three half-days a week have been set apart for the work of this branch of the Public Health Service.

During 1937 the following attendances have been made at the Centres:—

| | Barry Dock. | Barry Island. | Total. |
|---|---|---|---|
| Expectant Mothers .... | 421 | 68 | 489 |
| Babies (under one year) .... | 3,780 | 949 | 4,279 |
| Children (under School age) | 1,362 | 321 | 1,683 |
| Totals .... .... | 5,563 | 1,338 | 6,451 |

ANTE NATAL CLINIC.—

| | |
|---|---|
| *(a)* Number of Sessions .... .... .... .... .... | 48 |
| *(b)* Number of Attendances by expectant mothers .... .... | 489 |
| *(c)* Number of expectant mothers who attended during year .... | 155 |

GYNÆCOLOGICAL CLINIC.—

This Clinic functions for the dual purpose of giving advice to mothers suffering from complaints essentially occurring in women, and advice on contraception where pregnancy would be detrimental to the health of the mother.

During the year, the Clinic was opened on 24 sessions and 162 attendances were made, making an average of 6.75 patients per sessions. Fifty-two new cases were seen and the remainder re-visits.

*(c)* MATERNAL MORTALITY.—In 1937 there were three deaths from puerperal sepsis and one from other puerperal causes, equal to a rate of 5.69 and 1.89 per 1,000 live and still-births, as compared with 1.67 and 0.00 for 1936.

Brief details of the causes of death are as follows:—

CASE No. 1.—Patient admitted to Hospital as a mild case of puerperal sapræmia. General condition good. She continued to make satisfactory progress, but on the tenth day suddenly collapsed and died. Cause of death was certified as—

(1) Pulmonary Embolism.
(2) Puerperal Sapræmia.

CASE No 2.—Normal birth, 3rd child. Two days after confinement, patient had rigors, and doctor called in. The following day admitted to hospital, patient extremely ill. After admission a slight improvement was made, but five days afterwards died, having developed peritonitis. The cause of death was given as Puerperal Septicæmia.

CASE No. 3.—Although allocated to this district, was not a resident in Barry at the time of her illness. She was admitted to a hospital as one of incomplete abortion. She developed thrombo-phlebitis, pleurisy, and sudden death occurred due to pulmonary embolism.

CASE No. 4.—Admitted to a general hospital for phlebitis. History of confinement six weeks previously. Died one month after admission. The cause of death being:—

(1) Pulmonary embolism.
(2) Bi-lateral femoral thrombosis.

*(d)* HEALTH VISITING.—Visits paid by the Health Visitors during the year:—

| | | | | |
|---|---|---|---|---|
| To Expectant Mothers .... | (1) First Visits .... | 176 .... | (2) Total Visits .... | 265 |
| To Infants under one year | (2) First Visits .... | 443 .... | (2) Total Visits .... | 2,773 |
| To Children, one to five | .... .... .... | .... | Total Visits .... | 3,445 |

INFANT FEEDING.—The following table shows the method of feeding of 2,773 children under one year of age.

TABLE X.

| Nature of Food. | New Births. | Two Months. | Four Months. | Seven Months. | Nine Months. | Twelve Months. | Totals. |
|---|---|---|---|---|---|---|---|
| Breast only .... .... .... | 386 | 271 | 254 | 169 | 24 | — | 1,104 |
| Breast and Cow's Milk .... .... | 3 | 3 | 10 | 9 | 4 | — | 29 |
| Breast and other Foods .... .... | 14 | 22 | 32 | 69 | 79 | — | 216 |
| Cow's Milk only .... .... .... | 4 | 15 | 36 | 28 | 19 | — | 102 |
| Dried Milk only .... .... .... | 21 | 85 | 98 | 122 | 60 | 5 | 391 |
| Milk and other Foods .... .... | 3 | 6 | 15 | 35 | 180 | 135 | 374 |
| Condensed Milk and Patent Foods .... | 11 | 17 | 17 | 34 | 11 | 2 | 92 |
| Other Foods .... .... .... | 1 | — | 1 | 35 | 102 | 326 | 465 |
| Total .... .... | 443 | 419 | 463 | 501 | 479 | 468 | 2,773 |

Table XII shows the classification of Diseases and Defects discovered at the Welfare Centre during 1937.

| Defect or Disease. | Children under one year. | Children one and under five. | Total. |
|---|---|---|---|
| DISEASES DUE TO DISORDERS OF NUTRITION. | | | |
| Inanition | 2 | 5 | 7 |
| Rickets | 1 | 5 | 6 |
| Malnutrition | 65 | 61 | 126 |
| DISEASES CAUSED BY INFECTION. | | | |
| Whooping Cough | 7 | 6 | 13 |
| Chicken Pox | 1 | — | 1 |
| Diarrhoea | 12 | 20 | 32 |
| Syphilis Congenital | — | — | — |
| Pyrexia (uncertain origin) | — | — | — |
| Ringworm (Head) | — | — | — |
| Ringworm (Body) | 2 | 5 | 7 |
| Measles | 14 | 3 | 17 |
| Mumps | — | 1 | 1 |
| Diphtheria | — | 1 | 1 |
| Scarlet Fever | 1 | — | 1 |
| SKIN DISEASES. | | | |
| Scabies | — | 12 | 12 |
| Impetigo | 8 | 24 | 32 |
| Other Diseases | 68 | 122 | 190 |
| EYE. | | | |
| Blepharitis | 1 | 7 | 8 |
| Conjunctivitis | 10 | 8 | 18 |
| Squint | — | 4 | 4 |
| Other Conditions | 22 | 22 | 44 |
| EAR. | | | |
| Otitis Media | 9 | 21 | 30 |
| Other Conditions | 24 | 27 | 51 |
| NOSE AND THROAT. | | | |
| Adenoids and Enlarged Tonsils | — | 35 | 35 |
| Adenoids | — | 16 | 16 |
| Other Conditions | 22 | 48 | 70 |
| Dental Caries | 6 | 37 | 43 |
| Enlarged Cervical Glands | — | 20 | 20 |
| HEART AND CIRCULATION. | | | |
| Congenital Heart Disease | — | 1 | 1 |
| Anaemia | 4 | 10 | 14 |
| DISEASE OF LUNGS. | | | |
| Bronchitis | 28 | 21 | 49 |
| Other Non Tubercular Diseases | 26 | 72 | 98 |
| Pulmonary Tuberculosis (suspected) | — | — | — |
| Other Forms of Tuberculosis | — | — | — |

## TABLE XII *(continued)*.

| Defect or Disease. | Children under one year. | Children one and under five. | Total. |
|---|---|---|---|
| Diseases of Digestive System. | | | |
| Conditions of Mouth, Stomach and Bowels | 206 | 57 | 263 |
| Umbilical Hernia | 62 | 18 | 80 |
| Hernia | 4 | 3 | 7 |
| Diseases of Nervous System. | | | |
| Mentally Deficient | — | — | — |
| Other Conditions | 2 | 1 | 3 |
| Disease of Generative System. | | | |
| Phimosis | 46 | 10 | 56 |
| Hydrocele | — | — | — |
| Other Conditions | 1 | 1 | 2 |
| Congenital Deformities. | | | |
| Talipes Equino Varus | 3 | 1 | 4 |
| Cleft Palate | — | — | — |
| Infantile Paralysis | — | — | — |
| Other Conditions | 11 | 20 | 31 |
| Minor Injuries | 4 | 12 | 16 |
| Other Diseases or Defects | 25 | 77 | 102 |

| | Under one year. | One and under five. | Total. |
|---|---|---|---|
| *(a)* Number of children having defects to be kept under observation, or referred for treatment | 397 | 452 | 849 |
| *(b)* Number of Individual children not requiring observation or treatment | 94 | 42 | 136 |
| Totals | 491 | 494 | 985 |

HOME HELPS.—No case was provided with the services of a Home Help.

DRIED MILK.—During the year 474 cases were supplied with 11,621 lbs. of dried milk at the cost of the Committee. There has been a decrease of 745 lbs. in the amount of dried milk issued at the cost of the Committee, as compared with 1936.

OPERATIVE TREATMENT.—The following cases of children under school age received operative treatment at the School Clinic:—

| | |
|---|---|
| Adenoids and Enlarged Tonsils | 14 |
| Dental Caries | 84 |
| Total | 98 |

The following conditions discovered in children under five years of age received treatment at the Accident and Surgical Hospital:—

| | |
|---|---|
| Abdominal | 2 |
| Abcess | 2 |
| Burns | 2 |
| Cellulitis | 1 |
| Convulsions | 1 |
| Fractured Femur | 1 |
| Fractured Humerus | 1 |
| Fractured Tibia | 1 |
| Gastro Enteritis | 1 |
| Haematoma of Scalp | 1 |
| Head Injury | 1 |
| Iodine Poisoning | 1 |
| Mastoid | 2 |
| Naevus | 1 |
| Otitis Media | 1 |
| Pyloric Stenosis | 3 |
| Scalds | 1 |
| Septic Hand | 1 |
| Umbilical Hernia | 1 |
| Total | 25 |

OPHTHALMIA NEONATORUM.—During 1937 six notifications of this disease were received and were investigated by the Health Visitors. The cases recovered, and no permanent injury to the eyes was noted.

TABLE XIII.

| Ophthalmia Neonatorum. | Cases. | | | Vision Unimpaired. | Vision Impaired. | Total Blindness. | Deaths. |
|---|---|---|---|---|---|---|---|
| | Notified. | Treated. At Home. | Treated. In Hospital. | | | | |
| 6 | 6 | 6 | — | 6 | — | — | — |

DENTAL TREATMENT.—Cases are referred by the Medical Officer of the Maternity and Child Welfare Centres and also the Medical Officer to the Ante-Natal Clinic to the Dental Surgeon for treatment.

During the year 105 expectant and nursing mothers, and 84 children under school age received dental treatment at the School Clinic.

The following table shows the work done during the year 1937:—

TABLE XIV.

| | No. of Attendances. | Extractions. | | Fillings. | | Dressings. | Anaesthesia. | Dentures. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Permanent. | Temporary. | Permanent. | Temporary. | | | Partial | Complete | Repairs |
| Mothers .... | 254 | 329 | — | 3 | — | 30 | 107 | 2 | 16 | 3 |
| Children .... | 104 | — | 107 | — | 24 | 10 | 52 | — | — | — |
| Totals .... | 358 | 329 | 107 | 3 | 24 | 40 | 159 | 2 | 16 | 3 |

## ORTHOPAEDICS.

Cases of physically defective children under school age are referred from the Centres to the Prince of Wales' Hospital, Cardiff, for treatment. The expenses incurred in necessitous cases are paid out of the funds of the Neale Trust.

During the year 31 cases received remedial treatment at the Hospital.

## CHILDREN ACT, 1908.

The functions relating to infant life under Part I of this Act, have been taken over as part of the Maternity and Child Welfare Scheme in accordance with section 2 of the Local Government Act, 1929. The Health Visitors have been appointed to carry out the duties.

TUBERCULOSIS. Pulmonary: forty-eight cases of pulmonary tuberculosis were notified during the year as compared with forty for 1936.

Other forms: Fourteen cases of other forms of tuberculosis were notified during 1937 as compared with eighteen for 1936.

The death-rate from pulmonary tuberculosis was 0.834 per 1,000 population, as compared with 0.517 for 1936. 14.9 per cent. of deaths from pulmonary tuberculosis had not been notified by the doctors.

The death-rate from other forms of tuberculosis was 0.166 per 1,000 population, as compared with 0.272 for 1936. 18.2 per cent. of the deaths from other forms had not been notified.

The high mortality rate for pulmonary tuberculosis can be accounted for by the fact that of the seventeen male deaths, six were seamen, and of the thirteen female deaths, two were wives of seamen. Also two deaths amongst the sea-faring class although allocated to this district were not residents of Barry, having no fixed abode. Two further male deaths occurred in Mental Institutions, and it is well known that the death-rate from tuberculosis in this type of Institution is high. Of the non-pulmonary deaths from tuberculosis, one seaman is included. If we deduct the seamen plus the mental cases, the mortality rate from all forms would be 0.75. For pulmonary tuberculosis the rate would be 0.583. This, in my opinion, gives a fairer indication of the death-rate from this disease amongst Barry residents.

Table XV shows the classification of new cases and deaths during 1937, according to age, groups and sex.

### TABLE XV. TUBERCULOSIS, 1937.

| Age Groups. | New Cases. | | | | Deaths. | | | |
|---|---|---|---|---|---|---|---|---|
| | Pulmonary. | | Non-Pulmonary. | | Pulmonary. | | Non-Pulmonary. | |
| | M. | F. | M. | F. | M. | F. | M. | F. |
| Under 1 | — | — | — | — | — | — | — | — |
| 1—5 | — | — | 1 | 1 | — | — | — | 1 |
| 5—10 | — | — | 1 | 1 | — | — | — | 1 |
| 10—15 | — | — | 1 | 1 | — | — | — | — |
| 15—20 | — | 9 | 1 | 1 | 1 | 1 | — | 1 |
| 20—25 | 5 | 3 | — | — | 2 | 3 | 2 | — |
| 25—35 | 2 | 7 | 1 | 2 | 4 | 2 | 1 | — |
| 35—45 | 4 | 6 | 1 | — | 1 | 3 | — | — |
| 45—65 | 4 | 4 | 1 | 1 | 7 | 2 | — | — |
| 65 & upwards | 2 | 2 | — | — | 2 | 2 | — | — |
| Total | 17 | 31 | 7 | 7 | 17 | 13 | 3 | 3 |

## TABLE XVI.

### TREATMENT OF TUBERCULOSIS, 1937.

| Admissions to Treatment. | Pulmonary Tuberculosis. | | | | | | | Non-Pulmonary Tuberculosis. | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 to 5 years. | | 5 to 15 years. | | 15 and over. | | All Ages. | 1 to 5 years. | | 5 to 15 years. | | 15 and over. | | All Ages. |
| | M. | F. | M | F. | M. | F. | | M. | F. | M. | F. | M. | F. | |
| Institutional ... | — | — | — | — | 18 | 32 | 50 | 1 | - | 2 | 3 | — | 2 | 8 |
| Domiciliary Treatment ... | — | — | — | — | — | 1 | 1 | — | — | — | — | — | — | — |
| Dispensary Treatment ... | — | — | — | — | 1 | — | 1 | — | — | 2 | 1 | — | — | 3 |
| Totals ... ... | — | — | — | — | 19 | 33 | 52 | 1 | — | 4 | 4 | — | 2 | 11 |

Number of New Cases seen at the Tuberculosis Clinic—138.

DIAGNOSIS: Pulmonary—35; Non-Pulmonary—6; No. Active T.B.—85.
(12 kept under observation).

## TUBERCULOSIS.

Notification of tuberculosis is made to the Medical Officer of Health in accordance with the Public Health Tuberculosis Regulations, 1930, Articles 5 and 6.

In view of the high incidence of Tuberculosis both in mortality and morbidity in Wales and Monmouthshire as compared with that in England, some comments on this disease are opportune. The organised efforts to deal with tuberculosis in Wales differ in the administrative machinery from that in England. It is well therefore to give a brief account of the action taken on receipt of notification of a case of tuberculosis. Immediately on receipt of notification, enquiries are made by the Health Visitor, and the usual enquiry card and Form M 235/1 are filled in. These forms are supplied by the Welsh National Memorial Association and after enquiries are completed, copies of the forms are sent to the Association. In certain cases, general practitioners suggest that the cases be not visited. We have an arrangement whereby our Health Visitors attend on rota for the purpose of assisting the Tuberculosis Officer at the Clinic. Full details of all cases are forwarded to the Welsh National Memorial Association; patients and contacts are encouraged to attend the Clinic and periodical visits are made to secure up-to-date information as to the condition of patients. Enquiries are made as to (a) family history, (b) cases with which patient has been in contact, (c) housing conditions, (d) source of milk supply, (e) occupation of patient, and (f) place of work. Where housing conditions are unsatisfactory, the cases are referred to the Sanitary Inspector for investigation and action.

The following measures are taken to prevent spread of infection:—(a) Patients and contacts urged to carry out instructions of Tuberculosis Officer. (b) Advice given by Health Visitors as to methods of dealing with sputum and generally maintaining hygienic conditions. (c) Houses and clothing are disinfected. (d) Disinfectants supplied. In addition, the Barry Council gives preferential treatment to applicants for Council houses where any member of the family is suffering from tuberculosis.

A Report of an investigation into the incidence of Tuberculosis in the County of Anglesey and the Urban District of Barry appeared in June, 1937, and I should like to make the following comments on the Barry section of the Report.

The Barry rate is influenced by the inclusion of the sea-faring population, and in a statistical survey of the incidence of tuberculosis of this popluation for Wales, Dr. Cox reports that the rates for all classes of seamen were highest in Cardiff (12.61 per 1,000 seamen), and Barry (11.8 per 1,000 seamen). For British seamen alone, the Barry rate was 10.35 as against Cardiff's 8.96. The conditions under which seamen live may have something to do with this, and it is suggested that conditions are even worse in British than in foreign ships.

The time lapses between the onset of the disease, consultation of the general practitioner, and reference to the tuberculosis officer are discussed. This question is important, but it must be borne in mind that the detection of tuberculosis (except in obvious cases) is one of elimination, and a practitioner will not report a case until he is reasonably certain of his diagnosis. Even in cases referred to the tuberculosis officer, a considerable time elapses before confirmation or otherwise of the referred case. The delay in consulting a practitioner is due to the nature of the disease; colds appear in succession, but tuberculosis is not thought of by patients or parents, unless there is a family history, and valuable time is thus lost. A very interesting reference is made to the birth place of patient's parents. Of the 156 cases seen by the tuberculosis officer, 113 or 72.4% were born in Barry, but in the case of parents, in only 5.8% of instances were both parents born in Barry. Both parents of 43 patients or a percentage of 27.5 were born out of Wales.

This brings me to the question of the hereditary spread of the disease, and it has been suggested by experts that the disease is not hereditary. Assuming that this statement is correct and that children of tuberculous parents are born healthy, what is the position? If the children could be removed forthwith from such a tuberculous environment, some good might be done, but is this possible in 99% of the cases? If the disease is not hereditary, then environmental circumstances practically make it so. A very pleasing feature of the report is the reference to Barry's housing conditions.

In his final comments, *inter alia*, Dr. Cox states:—

"*(a)* The housing conditions of the tuberculous population are very good, and overcrowding very uncommon. *(b)* Water supply and sanitary arrangements are excellent. *(c)* The regular disinfection of the homes of tuberculous patients, during life, and greater use to be made of the disinfecting station for the sterilisation of bedding and personal clothes should be stressed, and *(d)* all cases of Tuberculosis should be notified."

I have arrived at the following conclusion after first of all stating that the onset of pulmonary tuberculosis is usually insidious, and its progress over long periods may not be marked by acute illness. It is this insidious character of the disease which causes sufferers to refrain from seeking medical advice in the earlier stages, and renders the task of treating the patient and preventing the spread of the disease to others so difficult. The primary need to-day is to convince individuals who are suffering from persistent lassitude, loss of weight, cough, etc., to seek medical advice.

1. The delay in diagnosis is more often the result of failure on the part of the patient to seek early advice than failure of the practitioner to recognise the beginning of the disease, the delay being due to the insidious onset and fear of loss of work.

2. There does not appear to be evidence of unreasonable delay (in any large proportion of cases) on the part of the family doctor in referring cases to the tuberculosis officer. This procedure is entirely voluntary on the part of the private medical practitioner.

3. The initiative to seek treatment rests with the patient himself, and the remedy lies in the education of the public as to the symptoms and dangers of tuberculosis, and the need for prompt treatment in its early stages.

## PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925.

It was not necessary to take action under these Regulations, relating to tuberculous employees in the milk trade.

## PUBLIC HEALTH ACT 1925, SECTION 62.

No action was taken under this section, which empowers the Council to apply for an order for the removal to hospital of infectious persons suffering from pulmonary tuberculosis.

## TREATMENT OF VENEREAL DISEASES.

Dr. B. A. Thomas, Medical Officer of the Glamorgan County Council, Branch Clinic, Barry, has kindly compiled the following report and statistics in connection with the treatment of venereal diseases at Barry during the year 1937.

The number of new cases admitted during the year remains much the same as in the previous year. The attendances made show a decrease, chiefly owing to the large number of seamen amongst the patients, and consequently more frequent transfers.

That extra care is being taken by the public in relation to venereal disease is shown by the fact that roughly 10% of new patients seen at the Clinic are not suffering from any venereal condition and attend only to be reassured on this point.

A disquieting factor is the high proportion of gonorrhoea cases, which cease to attend after amelioration of symptoms or before a final cure. This is especially marked amongst female patients.

The exhibition of the sulphonilamide series of drugs, holds out an earlier and surer prospect of cure in gonorrhoea, and results to date support this view.

The frequent reference of cases from the Public Health Services of the Barry Urban District Council to the Clinic is responsible for the earlier diagnosis and treatment of latent venereal infection than would otherwise be the case.

The following cases continued to receive treatment (from 1936)—

| *Disease.* | *Males.* | *Females.* |
|---|---|---|
| Syphilis .... .... ... .... | 22 .... | 18 |
| Gonorrhoea .... .... .... .... | 19 .... | 11 |

An analysis of new patients admitted during the year is shown in Table XVII.

### TABLE XVII.

| Disease. | Maternity and Child Welfare. | | School Medical Service. | | Public Health Service. | | Total. | |
|---|---|---|---|---|---|---|---|---|
| | 1—5 years. | | 5 to 14 years. | | 14 and over. | | | |
| | M. | F. | M. | F. | M. | F. | M. | F. |
| Congenital Syphilis .... | — | 1 | — | 1 | — | 1 | — | 3 |
| Syphilis .... .... | — | — | — | — | 51 | 12 | 51 | 12 |
| Gonorrhoea .... .... | — | — | — | — | 96 | 19 | 96 | 19 |
| Soft Chancre.... .... | — | — | — | — | 5 | — | 5 | — |
| Non-Venereal .... | — | — | — | — | 15 | 5 | 15 | 5 |
| Totals .... .... | — | 1 | — | 1 | 167 | 37 | 167 | 39 |

### TABLE XVIII.

Table XVIII shows the attendance of patients at the Clinic during 1937.

| Disease. | Males. | Females. | Totals. |
|---|---|---|---|
| Syphilis .... .... | 535 | 485 | 1,020 |
| Gonorrhoea .... .... | 1,097 | 326 | 1,423 |
| Soft Chancre.... .... | 8 | — | 8 |
| Non-Venereal .... | 24 | 5 | 29 |
| Totals .... .... | 1,664 | 816 | 2,480 |

RIVERS AND STREAMS.—There are no streams of any size in the area.

DRAINAGE AND SEWERAGE.—There are two main sea outfall systems of sewerage disposal in the area, one stationed at Cold Knap in the western end, and the other at Bendrick Rocks in the eastern end of the town. The sewers discharge below low water mark.

These outfalls take the whole of the sewerage of Barry with the exception of that from houses erected in Pontypridd Road and the western portion of Port Road. These houses are drained into two small disposal works situated on the western side of Pontypridd Road. The construction of these works was necessary owing to the level of the site where these houses were built being considerably lower than the level of the Council's main sewer in the neighbourhood.

With the exception of a few farmsteads in the outlying parts of the district and the houses referred to in the preceding paragraph, all houses are connected with the public sewers.

## SUMMARY OF THE SANITARY WORK CARRIED OUT DURING THE YEAR 1937.

### TABLE XIX.

| | No. on Register. | No. of Inspections. | No. of Premises where Nuisances or Defects discovered. | No. of Notices Served. | No. of Re-visits. |
|---|---|---|---|---|---|
| REGISTERED PREMISES— | | | | | |
| Common Lodging Houses .... .... | 2 | 10 | — | — | — |
| Seamen's Lodging Houses .... .... | 59 | 602 | 5 | 5 | 9 |
| Cowsheds .... .... | 23 | 116 | 29 | 29 | 42 |
| Dairies & Milkshops | 130 | 437 | 19 | 19 | 27 |
| Bakehouses .... .... | 34 | 171 | 22 | 22 | 29 |
| Workshops .... .... | 115 | 306 | 29 | 29 | 51 |
| Total .... .... | 363 | 1,642 | 104 | 104 | 158 |
| OTHER PREMISES— | | | | | |
| House Inspection .... | | 2,181 | 868 | 712 | 3,112 |
| Testing of Drains .... | | 290 | (included | above). | 360 |
| Schools and Public Buildings .... | | 20 | 1 | — | 2 |
| Tents and Vans .... | | 23 | 5 | 5 | 17 |
| Lanes and Dumps .... | | 206 | — | — | 168 |
| Total .... .... | | 2,720 | 874 | 717 | 3,659 |
| INSPECTION OF MEAT, FOODS, &c.— | | | | | |
| Butchers' premises .... | | 196 | 1 | 1 | 3 |
| Grocers' & Provision shops .... .... | | 291 | 6 | 6 | 15 |
| Fish & Fruit premises | | 320 | 36 | 36 | 58 |
| Fish Friers' premises | | 200 | 29 | 29 | 59 |
| Premises where Ice-cream is manufactured and sold .... | | 312 | 59 | 59 | 81 |
| Total .... .... | | 1,319 | 131 | 131 | 216 |
| GRAND TOTAL | 363 | 5,681 | 1,109 | 952 | 4,033 |

## SANITARY CIRCUMSTANCES OF THE AREA.

WATER.—Barry has an excellent supply ofwater from the Taff Fechan Water Supply Board. A detailed description of the supply appears in the Annual Report for 1930.

The chemical analyses of the water are satisfactory, whilst the bacteriological results indicate a water of good bacterial quality.

In view of the need for constant care in the supervision of the water supply, the following analysis is typical of the chemical and bacteriological composition of the water as supplied to the Town. The chemical analysis is expressed in parts per 100,000. In the bacteriological examination it will be noted that Bacillus Coli was absent from 100 millilitres.

### REPORT ON CHEMICAL ANALYSIS OF SAMPLE OF WATER,

22nd NOVEMBER, 1937.

| | |
|---|---|
| Number of Sample .... .... .... .... .... | 19,864. |
| Date of Analysis .... .... .... .... .... | November 23rd/27th. |
| Appearance in two-foot tube .... .... .... .... | Pale green, clear. |
| Reaction .... .... .... .... .... .... | Neutral, P.H.—6·8. |
| Total Hardness.... .... .... .... .... .... | 4·8. |
| (a) Temporary. | |
| (b) Permanent. | |
| Chlorine .... .... .... .... .... .... | ·9. |
| Nitrogen as Nitrates .... .... .... .... .... | Nil. |
| Oxygen .... .... .... .... .... .... | Nil. |
| Saline (or "Free") Ammonia .... .... .... .... | ·0010. |
| Organic (or "Albuminoid") Ammonia .... .... .... | .0024. |
| Poisonous Metals .... .... .... .... .... | Nil. |
| Nitrates .... .... .... .... .... .... | Nil. |
| Phosphates .... .... .... .... .... .... | — |
| Sulphates .... .... .... .... .... .... | — |
| Microscopic Examination of the Sediment .... .... | Trace only. Oxide of Iron. Animate forms rare. |
| Volume of Sediment .... .... .... .... .... | ·1. |

REMARKS.—A fairly soft water.
The chemical and microscopical characters are satisfactory.

### REPORT ON BACTERIOLOGICAL EXAMINATON OF WATER.

25th NOVEMBER, 1937.

| | |
|---|---|
| Laboratory Reference .... .... .... .... .... | 19,865. |
| Date Received .... .... .... .... .... | 22/11/37. |
| Sender's Reference .... .... .... | |
| Description of Sample .... .... .... .... .... | Tap. Public Supply. |
| Bacteria developing per m.l. at 20 C. .... .... .... | 320. |
| Bacteria developing per m.l. at 37 C. .... .... .... | 4. |
| Bacillus Coli present in .... .... .... .... | — |
| Bacillus Coli absent in .... .... .... .... | 100 m.l. |

REMARKS—Satisfactory.

PREMISES AND OCCUPATIONS CONTROLLED BY BYELAWS OR REGULATIONS.—Particulars of inspection and action taken in respect of premises controlled by Byelaws and Regulations are detailed in the summary of sanitary work carried out during the year.

COMMON LODGING HOUSES.—There are only two common lodging houses in the District registered to accommodate 60 persons. These houses have been frequently inspected and the Byelaws found to be generally well observed.

The accommodation is more than sufficient to meet the requirements.

SEAMEN'S LODGING HOUSES.—There are 59 seamen's lodging houses in the district registered to accommodate 303 seamen. The houses are well kept and regulated, and are subject to constant supervision.

TENTS, VANS AND SHEDS.—The number of tents, vans and sheds is decreasing annually, and little difficulty is now being experienced with this type of dwelling.

## TABLE XX.

## FACTORIES, WORKSHOPS AND WORKPLACES.

### 1.—INSPECTION OF FACTORIES, WORKSHOPS, AND WORKPLACES, INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

| Premises. | Number of | | |
|---|---|---|---|
| | Inspections. | Written Notices. | Prosecutions. |
| Factories (including Factory Laundries) .... .... | 149 | 6 | — |
| Workshops (including Workshop Laundries) .... | 303 | 23 | — |
| Workplaces (other than Outworkers' premises) | 29 | 1 | — |
| Total .... .... | 481 | 30 | — |

### 2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

| Particulars. | Number of Defects. | | | Number of Prosecutions. |
|---|---|---|---|---|
| | Found. | Remedied. | Referred to H.M. Inspector | |
| Nuisances under the Public Health Acts:— | | | | |
| Want of cleanliness .... .... .... | 23 | 23 | — | — |
| Want of ventilation .... .... .... | — | — | — | — |
| Overcrowding .... .... .... .... | — | — | — | — |
| Want of drainage of floors .... .... .... | — | — | — | — |
| Other nuisances .... .... .... .... | 4 | 4 | — | — |
| Sanitary accommodation: insufficient .... .... | — | — | — | — |
| unsuitable or defective | 3 | 3 | — | — |
| not separate for sexes | — | — | — | — |
| Offences under the Factory and Workshop Acts:— | | | | |
| Illegal occupation of underground bakehouse (s. 101) .... .... .... | — | — | — | — |
| Other offences .... .... .... .... | — | — | — | — |
| (Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921) | — | — | — | — |
| Total .... .... | 30 | 30 | — | — |

RAG FLOCK ACTS, 1911 and 1928.—There are no premises in the District where rag flock is manufactured or sold.

HOUSING.—*(a)* CLEARANCE AND IMPROVEMENT AREAS.—Barry is a comparatively new town and consequently no areas have been scheduled for "Clearance" or "Improvement."

*(b)* DEMOLITIONS.—The few houses that were unfit for human habitation have already been demolished.

*(c)* HUTMENTS.—The 60 huts at the Buttrills Estate have now been demolished, and the displaced families accommodated in houses recently erected by the Council.

*(d)* TEMPORARY STRUCTURES.—I have previously reported that temporary structures should not be encouraged, and that as far as possible plans should not be passed for their erection. My Council have considered this matter, and generally speaking are acting upon this suggestion.

HOUSING REPAIRS.—Reconditioning of houses has taken up considerable time and the detailed particulars indicate that 712 notices were served during the year. Generally speaking, efforts are being made by owners to carry out repairs within reasonable time, but as I have pointed out in previous reports economic circumstances have necessitated extended time being given where extensive repairs are required.

DRAINS.—During the year 290 drains were tested and where defects were discovered the necessary notices were served. The provisions of the Barry Urban District Council Act, 1913, provide for inspection where repairs are being effected and this ensures satisfactory work being done.

PUBLIC CLEANSING.—The bi-weekly removal of house refuse and the daily removal of trade refuse is carried out by means of mechanical transport. The whole of the refuse is conveyed to the Refuse Destructor and burnt. Very little salving is carried out as the receipts for the past have not compensated for the additional cost involved in handling.

The quantity of refuse destroyed during the year was 9,877 tons, 11 cwts.

## SWIMMING BATHS AND POOLS.

The Council have under consideration the question of a scheme for the Filtration, Purification, Sterilisation and Aeration of the water of the Open-Air Swimming Bath at Cold Knap.

At present the water is treated by means of Chloros for purification purposes, and the water is changed as frequently as tides permit. The method is not altogether satisfactory, and it is well, therefore, to review modern methods of maintaining swimming pools in a pure and hygienic condition.

Firstly, a short account of the purification of water by Ozone is as follows:—The purification of water for Swimming Baths by Ozone is comparatively recent in its application in this country but not on the Continent. The limited knowledge of the wonderful properties of this agency may produce an extravagant impression of its potentialities amongst the results commonly achieved by it. Contaminated water is completely purified, vitiated air is refined, flour and vegetable fibres are rapidly bleached, milk is sterilised, oysters are rendered fit for human consumption, and there are many other possible applications. It is necessary, therefore, to consider briefly some of the salient properties of Ozone. Ozone was discovered in the year 1785 by Van Marum, and is an allotropic modification of Oxygen. While one molecule of oxygen occupying two volumes contains two atoms of oxygen, one molecule of Ozone occupying two volumes contains three atoms of oxygen. The formula is $O_3$, that of Oxygen being $O_2$, and it is the addition of this extra atom of oxygen which gives Ozone its wonderful properties.

The principal value of Ozone lies in its surprising oxidising activity, and it has the advantage of leaving no new chemical on the bodies on which it acts. The potential energy of Ozone is noteworthy being approximately thirty calories, as compared with twenty calories for peroxide of hydrogen, and eight calories for hydrochlorites.

The property which makes Ozone so valuable in sterilising water is due to the fact that whilst oxygen acts very slowly on metals and organic matter at ordinary temperatures, Ozone acts on these substances immediately. Most bacilli are rapidly destroyed directly Ozone comes into contact with them. For water purification Ozone then is the ideal agent. Complete sterilisation and elimination of harmful pathogenic germs and oxidisable organic matter being affected after a few seconds intimate contact with the water.

The production of Ozone depends upon the fact that two bases are fundamental, (1) electrical energy and (2) the air which all living organisms breathe, so that an inexhaustable supply of oxygen is available for Ozone production. Ozone is prepared when oxygen or air is submitted to the action of high voltage electric discharge.

The problem of purification of water for Swimming Baths is still a long way from a satisfactory solution. Much remains to be done which can only be accomplished by highly qualified specialists and unbiased experts.

To keep and maintain any volume of water free from pollution for long, even if it is gradually displaced by added fresh water is an almost impossible task. It is certain to be contaminated when large numbers of human beings are immersed in it, however many foot splashes, showers, soap washes they pass through prior to immersion in the water. The contamination of the bath water derived from their persons may be divided into three classes:—(1) Particulate matter, (2) Matter in solution, (3) Bacterial pollution. The latter although microscopic and having no visible effect on the appearance of the water is the one which causes the spread of infectious diseases. The degree of contamination depends on many factors including the "bathing load," *i.e.*, the number of bathers entering the water in any given period of time, "the density of the bathers," *i.e.*, the number of bathers in the water at any one time, and the "turnover period," *i.e.*, the time taken to introduce a volume of purified water equal to the volume of the bath. The rate of multiplication of the bacteria introduced depends upon the suitability of the water as a culture medium, the temperature of the water, and by the presence of some artificially added germicide, such as chlorine. Comparison of Ozone purification with that by chlorine and its compounds is important in view of the increasing use of Public Swimming Baths in this country. Chloramination after filtration is generally used in the vast majority of Public Swimming Baths at the present time. Unfortunately chlorine even when used in the strength recommended by the Ministry, namely not less than 0·2 parts per million, and not more than 0·5 parts per million, has a peculiar irritating effect on the mucous membranes of the eyes, nose, mouth and throat. This is especially so in a large number of susceptible people. Although chlorine is a germicide of great power, and in proper dosage is certain in its action, a time factor is necessary.

Briefly in the system of purification by filtration and chlorination, the general method is as follows:—

Unlike the old system where fresh water was used every so many days, practically the same water is now continuously in use. It is drawn from the deep end of the bath and pumped through the mesh of a heavy-gauge copper basket where all the larger objects are trapped. It is then passed on to the filter, a coagulant being added before it reaches this to precipitate certain of the dissolved impurities. The filter is usually a large, boiler-like structure, at the bottom of which are layers of sand graded from a very fine to a coarse variety. The water is sprayed on this, the precipitated impurities remaining on the top and forming a layer of gelatinous matter which in turn arrests many other impurities. The water trickles through the layers of sand and passes on to the next stage of the treatment.

This is usually chlorination. Chlorine is highly bactericidal, and though it has an unpleasant odour an admixture of ammonia will, to some extent, remedy this. The chlorine, as a gas, is stored under high pressure in a cylinder. It passes through a reducing valve to an apparatus which mixes the required dose with a certain quantity of water, the aqaeous solution being added to the main flow from the bath.

The water can now be said to be practically pure. The heavier contaminating matter has been trapped, all the lighter matter and some bacteriae has been left in the filter, while the remainder has been killed or rendered innocuous by the chlorine. The water, however, may still contain some colouring matter either from the impurities it contained or from the admixture of chemicals. The next and final treatment—aeration—does away with this and imparts a sparkling and clean appearance.

To effect aeration the water is vigorously mixed with air. This can be done by one of two ways: (a) by internal aeration whereby air and water are forced together either by means of gravity or by a compressor, or (b) by external aeration when it is pumped to the top of an appropriate structure in the open air—in the case of out-door pools this is usually embodied in an ornamental fountain—and allowed to splash down over a series of trays. With both of the above systems the results are the same. The water becomes supersaturated with air, and oxidation of the remaining organic impurities takes place, the gasses given off being expelled with the surplus air.

The water then returns to the bath through the shallow end, clean, pure, sterile and sparkling, inviting the swimmer to a plunge.

From the above account the advantages of the method of Ozone over that of Chlorine or Chloramine may be summarised thus:—

(1) Immediate elimination of all pathogenic organisms and the reduction of the total count to a few colonies.

(2) No obnoxious taste or smell, and no irritating effects upon the membranes of the throat, nose or ears.

(3) The most perfect aeration of the water is obtained and mechanical aeration by means of injection of air can be omitted.

(4) The improved appearance and colour of the water. Water treated by Ozone is bright, sparkling, and almost colourless.

(See also page 73, "Swimming Instruction," under School Medical Section of this Report).

## BED BUG.

(a) For several years a number of families were accommodated in wooden huts at the Buttrills Estate. During the year, the Council erected a number of houses in Cawley Place and Chesterfield and Fairford Streets, and the families from the huts were transferred to these new houses. Prior to removal the furniture and effects were fumigated, and the huts destroyed by fire.

(b) Forty-one complaints were received as to verminous premises. These were inspected and instructions given as to the best methods of ridding the premises of vermin. Generally speaking, satisfactory results were obtained by stripping wall paper, spraying with some suitable insecticide, using the blow lamp and stopping in all cracks and defects in walls.

## HOUSING STATISTICS, 1937.

| | |
|---|---|
| 1. *Inspection of Dwelling-houses during the Year:—* | |
| (1) *(a)* Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) .... .... .... | 2,181 |
| *(b)* Number of inspections made for the purpose .... .... .... | 5,293 |
| (2) *(a)* Number of dwelling-houses (included under sub-head (1) above which were inspected and recorded under the Housing Consolidated Regulations, 1925 .... .... .... .... | 701 |
| *(b)* Number of inspections made for the purpose .... .... .... | 1,921 |
| (3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .... | Nil. |
| (4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation .... .... .... .... .... | 621 |
| 2. *Remedy of Defects during the Year without Service of formal Notices:—* | |
| Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers .... | 651 |

### 3. *Action under Statutory Powers during the Year:—*

A.—Proceedings under sections 9, 10 and 16 of the Housing Act, 1936:

| | |
|---|---|
| (1) Number of dwelling-houses in respect of which notices were served requiring repairs | 70 |
| (2) Number of dwelling-houses which were rendered fit after service of formal notices:— | |
| *(a)* By owners | 63 |
| *(b)* By local authority in default of owners | — |

B.—Proceedings under Public Health Acts:

| | |
|---|---|
| (1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied | 21 |
| (2) Number of dwelling-houses in which defects were remedied after service of formal notices:— | |
| *(a)* By owners | 1 |
| *(b)* By local authority in default of owners | — |

C.—Proceedings under sections 11 and 12 of the Housing Act, 1936:

| | |
|---|---|
| (1) Number of dwelling-houses in respect of which Demolition Orders were made | — |
| (2) Number of dwelling-houses demolished in pursuance of Demolition Orders | — |

D.—Proceedings under section 12 of the Housing Act, 1936:

| | |
|---|---|
| (1) Number of separate tenements or underground rooms in respect of which Closing Orders were made | Nil. |
| (2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit | Nil. |

### 4. *Housing Act, 1936. Part IV. Overcrowding.*

| | |
|---|---|
| (a) (1) Number of dwellings overcrowded at the end of the year | 20 |
| (2) Number of families dwelling therein | 32 |
| (3) Number of persons dwelling therein | 167 |
| (b) Number of new cases of overcrowding reported during the year | 3 |
| (c) (1) Number of cases of overcrowding relieved during the year | 49 |
| (2) Number of persons concerned in such cases | 261 |

(d) Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding.

Nil.

(e) There are still a number of properties in the District vacant, but generally speaking these are too highly rented to fall within the capacity of the working class people to pay. I have no doubt, however, that with a decreasing population and an increase in the number of houses being built by private enterprise, that overcrowding will soon be a thing of the past.

## INSPECTION AND SUPERVISION OF FOOD.

(1) MILK SUPPLY.—During the year forty-four samples of milk were taken and submitted for bacteriological examination. Of this number, thirty-seven were reported satisfactory and seven unsatisfactory. Of the latter, five referred to milk produced outside the area and two inside. Steps were taken to deal with all cases reported unsatisfactory.

MILK (SPECIAL DESIGNATIONS) ORDER, 1936.—The use of pasteurised milk as laid down in the Milk (Special Designations) Order, 1936, was reported upon in detail in my report for 1936. The rationalisation of the milk industry means ~~the~~ of necessity that milk from many different sources must be bulked and it needs only one cow to be infected for the whole supply to become contaminated. The only way this can be guarded against is by pasteurisation. There still persists a certain amount of uniformed prejudice against pasteurisation, but the Chief Medical Officer of the Ministry of Health is convinced that there is no significant difference in nutritive value between raw and pasteurised milk. A clean raw milk is not necessarily a safe milk, and the only practical way to reduce the risk to a minimum is by efficient pasteurisation or by some other form of heat treatment.

Two retailers are licensed for the distribution of Tuberculin Tested milk, one for Pasteurised milk and two for Accredited milk.

(2) COWSHEDS AND DAIRIES.—There are 23 producers and 130 milk retailers in the area. Regular visits are made by the Chief Sanitary Inspector to all cowsheds and dairies within the district, and action taken where necessary. In addition routine inspection of all dairy cows is carried out by the Dairy Cows Inspector. This latter arrangement will have to be modified as and from April 1st, 1938. Under the Agriculture Act, Part IV (Disease of Animals), 1937, the transfer of functions of Veterinary Inspections of local authorities direct to the Ministry of Agriculture and Fisheries will take effect.

MILK MARKETING BOARD, MILK IN SCHOOLS SCHEME.—There are two firms in the town supplying Pasteurised Milk. The milk is pasteurised by the "Holder Process," both firms having installed "Desco" Pasteurising Plants.

(3). ICE-CREAM.—Complete control of the premises where Ice-Cream is manufactured and sold will not be obtained until general registration is made compulsory. The provisions of the Barry Urban District Council Act, 1913, quoted below are enforced, but these are not sufficiently wide in their scope to secure the best results.

Section 93 of the Barry Urban District Council Act, 1913, provides that:—

1. Any person being a manufacturer or vendor, or merchant or dealer in ice-cream or other similar commodity who:—

*(a)* Causes or permits ice-cream or other similar commodity or any materials used in the manufacture thereof to be manufactured, sold or stored in any sleeping room, or in any room, cellar or place which is in a condition likely to render such commodity injurious to health, or in which there is an inlet or opening to a drain.

(*b*) In the manufacture, sale or storage of such commodity does any act or thing likely to expose such commodity to infection or contamination, or omits to take proper precaution for the due protection of such commodity from infection or contamination,................shall be liable to a penalty not exceeding forty shillings.

(4) MEAT INSPECTION.—An important addition is the detailed Table of carcases inspected and condemned as suggested in the Circular.

All animals are examined by the Council's Meat Inspector, both before and after slaughter. When considered advisable in certain cases, immediate slaughter is ordered. Casualties are occasionally brought in from farms, in some cases death has already taken place, in other cases of serious injury they are slaughtered immediately on arrival. A post-mortem examination is made in each case. In the case of animals brought in dead, the majority are slaughtered at the farm on humane grounds, *i.e.*, fractured limbs, etc.

## CARCASES INSPECTED AND CONDEMNED.

| | Cattle excluding Cows. | Cows. | Calves. | Sheep and Lambs. | Pigs. |
|---|---|---|---|---|---|
| Number killed .... .... .... .... | 770 | 58 | 252 | 6602 | 4617 |
| Number inspected .... .... .... | 770 | 58 | 252 | 6602 | 4617 |
| All diseases except Tuberculosis.<br>Whole carcases condemned .... .... | .... | 1 | .... | 12 | 3 |
| Carcases of which some part or organ was condemned .... .... .... | 143 | 4 | 1 | 186 | 120 |
| Percentage of the number inspected affected with disease other than tuberculosis .... .... .... .... | 18·57 | 8·62 | 0·39 | 2·99 | 2·66 |
| Tuberculosis only.<br>Whole carcases condemned .... .... | .... | 9 | 1 | .... | 17 |
| Carcases of which some part or organ was condemned .... .... .... | 58 | 6 | .... | .... | 101 |
| Percentage of the number inspected affected with tuberculosis ... .... | 7·53 | 25·86 | 0·39 | .... | 2·55 |

HUMANE KILLING.—In the year 1931 byelaws were introduced making the stunning of animals by mechanically operated instruments compulsory.

(5). BUTCHERS' PREMISES.—The meat inspection in the Butchers' shops is carried out by your Sanitary Inspectors and during the year 1,021 lbs. of meat were destroyed. The general standard of the meat retailed in the area is good and the traders' premises are well kept.

Practically the whole of the shops are now provided with modern refrigerating plants.

(6). FOOD STORES.—The food stores have been regularly inspected, and 2,600 lbs. of various foods found unfit for human consumption was destroyed.

## SHOPS ACTS, 1912—1934.

Day and night duties under the provisions of the above Acts have been regularly carried out during the year, and generally speaking the Acts were found to be well observed. The main difficulties are experienced in connection with the hours of employment of young persons, and a further extension of powers is needed to deal with the hours of young persons employed in places other than shops.

## LEGAL PROCEEDINGS.

Seventeen cases of legal proceedings were taken during the year and the results were as follows:—

| *No.* | *Offences.* | *Penalties.* |
|---|---|---|
| 1. | Illegal Lodging of Seamen (10 cases) .... .... .... .... | £10 10s. 0d. |
| 2. | Contraventions of Shops Acts (7 cases) .... .... .... .... | £3 10s. 0d. |

## METEOROLOGICAL RECORDS, 1937.

## TABLE XXI.

| Months. | Sunshine. | | | | Rainfall. |
|---|---|---|---|---|---|
| | Hours. | Maximum. | | Days with no sun. | Inches. |
| | | Day. | Hrs. | | |
| January .... | 41.3 | 7th | 6.3 | 12 | 4.03 |
| February .... | 61.8 | 23rd | 7.6 | 9 | 5.60 |
| March .... | 101.7 | 14th | 9.5 | 4 | 3.40 |
| April .... | 127.5 | 26th | 12.7 | 4 | 3.95 |
| May .... | 228.2 | 31st | 14.4 | 2 | 2.50 |
| June .... | 211.5 | 21st | 14.4 | 1 | 0.59 |
| July .... | 147.7 | 16th | 13.0 | 3 | 2.855 |
| August .... | 246.7 | 1st | 13.0 | — | 0.71 |
| September .... | 147.1 | 8th | 9.5 | 3 | 1.96 |
| October .... | 79.9 | 4th | 7.6 | 8 | 3.415 |
| November .... | 56.8 | 10th | 8.0 | 12 | 1.90 |
| December .... | 45.9 | 6th | 7.0 | 9 | 1.745 |
| Totals .... | 1,496.1 | | | 67 | 32.655 |

# PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASES.

## *(a)* NOTIFIABLE DISEASES.

346 cases of notifiable diseases were notified during the year as compared with 361 for the previous year. Of these 194 were removed to hospital and the rest treated at home. A complete tabulated statement of all notifiable diseases that occurred during the year is contained in another part of the report.

Scarlet Fever.—During the year the prevalence of this disease decreased. 73 cases were notified, and of these 64 were removed to hospital. Eleven other cases were admitted, but proved to be adventitious rashes of other diseases Amongst the eleven cases admitted one death occurred. This patient was a baby (male) aged 14 months. At the time of admission he was suffering from marked cellulitis of right leg with accompanying acute bronchitis. There were no physical signs of scarlet fever. Although there were five other children in the family whose ages ranged from 2½—9 years, no case of scarlet fever occurred amongst them.

The majority of the cases of scarlet fever showed mild forms of the three classical signs, namely, rash, tongue and throat. Occasionally, however, a severe form of the disease with high temperature, "Boiled Lobster" rash, marked inflammation of the throat with exudate, and accompanying adenitis, was admitted. Even these cases responded well to treatment by streptococcus Antitoxin (Scarlatina). The question arises as to the value of isolation in hospital of mild cases from the point of view of preventing the occasional dangerous case arising in the community.

Diphtheria.—The prevalence of this disease increased during the year, there being 127 cases notified. Of these 121 cases were admitted to hospital. In addition, 43 other cases were removed to hospital and treated for various non-diphtheritic conditions such as Tonsillitis, Quinsy, Vincent's Angina, and septic conditions of nose and throat.

There were four deaths amongst the cases of Diphtheria, three of whom died within twenty-four hours of admission to hospital, the fourth dying within one week. Of the first three deaths, the child had been ill in each case for over four days, and the fourth case for three days before medical advice was sought. A further death from Diphtheria occurred outside the district where the child had been living for over a year with the grand-parents.

Of the non-diphtheria cases three deaths occurred, which were classified as follows:—

(1) Baby aged 4 months. Acute Broncho-Pneumonia.

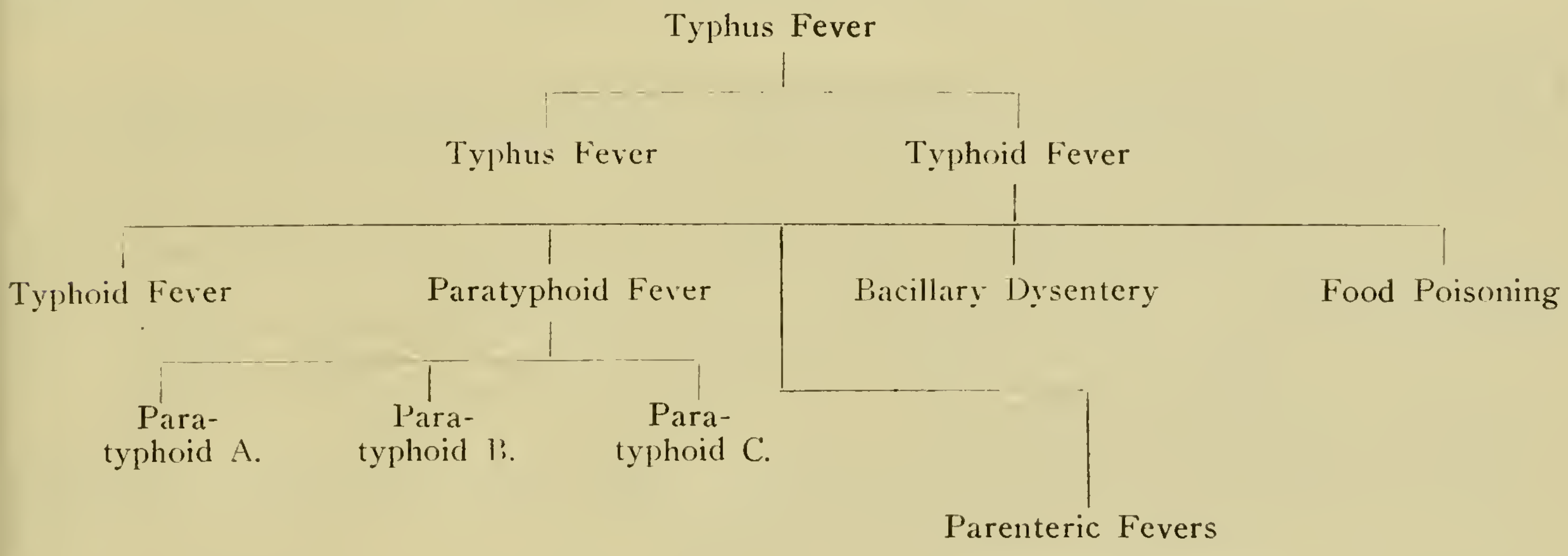
(2) Child aged 3 years. Broncho-Pneumonia following measles.

(3) Child aged 6 years. Acute Tonsillitis, the cause of death being Uraemia, due to acute diffuse glomerulo-nephritis.

The case fatality rate for this disease was 3.15 per cent., the "attack rate" being 3.53 per 1.000 population.

Immunisation.—At various times it has been reported to the Health Committee upon the advisability of introducing active immunisation of the child population of the district. As a result a sum of money has been included in the estimates of expenditure for 1938 for this purpose. A detailed report has been submitted to the Council for consideration, and particulars will appear in my report for 1938.

Typhoid Fever.—The recent outbreaks of typhoid fever in this Country have aroused a renewed interest in this disease which, since the Great War, had become comparatively rare. The public, who as a result have grown accustomed to a freedom from epidemics of a disease which 30—40 years ago was extremely common, have not unnaturally displayed surprise and alarm. The figures of the Registrar General show a remarkable fall in the death-rate. However, the occurrence of outbreaks in spite of the great advances in sanitary science shows the necessity for a never ceasing vigilance. The historical side of typhoid fever is of great interest; a case of Continued Fever up to 1849 in Great Britain was commonly called Typhus Fever. Since that time many varieties of Continued Fever with Enteritis have been differentiated, as shown by the undermentioned table:—



During the year, seven cases of obscure fever were admitted to hospital simulating the enteric group. Of these four gave a positive agglutination reaction to Bacillus Typhosus. The importance of detailed investigation as to the source of infection, owing to the above remarks, cannot be over-estimated. In three out of four of the positive cases, infection was traced to a history of the disease in a member of the family. In the fourth case, no direct evidence of a disease "carrier" was traced. The remaining three cases proved to be definitely non-enteric. Of the four cases with the disease, complete recovery took place, although one of them was admitted to hospital suffering from pneumonia and typhoid fever. Of the three negative cases, two were fatal, and post-mortem examination showed that one died of Acute Infective Endocarditis with no pathological signs in the abdomen, the other case showed pyaemic abscesses including cerebral abscess and septic pericarditis with a history of middle ear disease. The remaining case, although giving a history of profuse epistaxis and diarrhoea, gave a negative agglutination reaction, and proved to be a typical case of lobar pneumonia which made an uninterrupted recovery. Although the total number of cases is small from a real statistical point of view, it shows the aetiological factor to be the "carrier" problem, as shown by the details of each case.

*Case No. 1.*—Girl, aged 7 years, removed to hospital suffering from pneumonia. Blood examination positive to Bacillus Typhosus, H.—1/50, O.—1/250. Negative to Para A. and B. and Br. Abortus.

On investigation it was discovered that a brother of the patient, a deck-hand, was removed to hospital at Rotterdam two months previously suffering from typhoid fever. Discharged from hospital and arrived home three weeks prior to the patient being taken ill.

*Case No. 2.*—Girl aged 12 years. Gave a history of diarrhoea and fever of ten days duration. Blood agglutination positive reaction H.—1/150, O.—1/250 to Bacillus Typhosus, negative to Para A. and B. and Br. Abortus. Urine and faeces negative. Admitted to hospital the following day.

On investigation the only history obtainable was that the child had eaten "touched" fruit. In this case the father, a foreigner, gave a history of an illness many years previous simulating enteric fever. The blood agglutination reaction of the father proved positive to Bacillus ,Typhosus, H.—1/100. The patient made a complete recovery.

*Case No. 3.*—Boy aged 7½ years. Ten days after onset of suspicious symptoms, positive agglutination blood reaction to Bacillus Typhosus, 1/500. Admitted to hospital same day.

On investigation the history of the father having had an illness of the enteric group 12 years previously was discovered. Patient recovered and discharged quite fit.

*Case No. 4.*—Boy aged 15 years. History of rigors, high temperature, vomiting and delirium. Two weeks later, blood agglutination reaction positive to Bacillus Typhosus, 1/50. Removed to hospital.

Upon investigation no history of infection from "carriers," but history of drinking water from a spring. Examination of this water showed sewage contamination. Patient made an uninterrupted recovery.

These four cases were of the sporadic type, and occurred at marked intervals during the year.

It will be seen in three out of the four cases, close personal contact with a person who had previously suffered from the disease was proved. In the fourth case, contamination of the spring water by a "carrier" is extremely probable. It can be deduced from the above cases that the detection of "carriers," especially among individuals who handle food, is of great importance. Unfortunately the treatment of "carriers" seems to be of little use. The removal of the gall bladder when shown to be the source of infection, although the best chance of relief from the "carrier state" is not a procedure which would be lightly recommended.

PUERPERAL PYREXIA.—During the year five cases were notified as compared with two for the previous year.

PNEUMONIA.—Forty-eight cases of Pneumonia (all forms) were notified during the year, compared with forty-four for 1936. The death-rate from this disease was 0.89 per 1,000 population as compared with 0.463 for 1936.

Erysipelas.—The disease showed a slight increase during the year, 20 cases having been reported, as against 18 during the preceding year. The death-rate was 0.278 per 10,000 population as compared with 0.272 for 1936.

Ophthalmia Neonatorum.—This disease has already been referred to under the section of the report dealing with maternity and child welfare work.

## PREVENTION OF BLINDNESS.

Circular 1621 of the Ministry of Health is a call to all authorities to take all practicable steps to prevent blindness, and impaired sight.

Attention is drawn to the powers conferred on County Councils and local Sanitary Authorities under Section 66 of the Public Health Act, 1925 (now replaced by Section 176 of the Public Health Act, 1936).

The Prevention of Blindness and its treatment is a matter which concerns both County Councils and local Sanitary Authorities. (Vide Section 176 Public Health Act, 1936).

As far as this Authority is concerned certain obligations fall on the Maternity and Child Welfare Committee, the Education Committee, and also the Health Committee. There is nothing very new in the Circular, and most of the suggested arrangements are already being carried out. I should like to call attention to one or two points which are slightly difficult. In ophthalmia neonatorum it is suggested that when a case is admitted to hospital, the ideal arrangement is to admit both mother and child. The reason for this probably is that the addition of artificial rearing to the formidable task of saving the child's eyes is an impossible load. It is poor recompense to save the child's eyes and lose its life, which happens more frequently in babies which are separated from their mothers. Fortunately the number of cases referred for admission to hospital is very small, due no doubt to the prophylactic measures taken with the baby's eyes at birth. During 1936 only one case of this disease was notified, the case recovered, and no permanent injury to the eyes was noted.

The Circular advises that the ophthalmic department of the School Medical Service should be open to children under school age. I may state that this has always been carried out in Barry. The Circular also refers to the ophthalmic service provided by local Education Authorities, and it is in this department where we do not actually carry out (without the aid of a Voluntary Institution) the complete scheme as laid down by the Chief Medical Officer of the Board of Education.

By this I mean that we have not on our staff a Consultant Ophthalmic Surgeon, who could be called upon in certain cases both in regard to obscure diseases of the eye and also difficult refraction cases. The vast majority of cases can be dealt with by Assistant Medical Officers, but there are certain duties which should devolve upon an expert adviser.

We have a consultant orthopædic surgeon, a consultant gynæcologist, why not a consultant ophthalmologist? At present the only method of getting expert advice is by means of an Out-Patient Ticket for Cardiff Royal Infirmary, but refraction cases in children are not encouraged to attend the Institution. I beg to recommend that this question be dealt with at an early date.

Part V of the Circular refers to Venereal Diseases, and I am pleased to state that co-operation with the Branch Clinic of the County Council has been very successful.

Blindness due to venereal disease is almost wholly preventable. Treatment of parents will prevent ophthalmia neonatorum, congenital syphilis in children, and the effects of acquired syphilis will not appear if proper and long-continued treatment of affected persons is carried out.

Part VI. Prevention of Accidents.

Reference is made in the Circular to accidents involving injury to the eyes which occur in road-making, and ancillary processes, and in hedge cutting and trimming. It is pointed out that chipping stone, fitting paving stones and similar jobs are often carried out without protection to the worker. The attention of local Authorities who are responsible for the employment of men on work of this nature is drawn to the importance of taking all possible measures to reduce risks to which such workers are exposed, and also to screen, as far as possible, the passer-by from the risk of flying chips of stone, etc.

Finally, may I say that Blindness is one of the worst, if not the worst, of physical disabilities. Much of the joy of life is lost, and the economic handicap is serious.

To those employed in industry, " safety first " is the motto of all work-shops. Use of suitable goggles or masks where there are flying fragments, *e.g.*, grinding, stone breaking. A notice in every work-shop should be " If your work entails danger to the eyes, wear goggles. Goggles have saved hundreds of eyes, thousands have been lost for want of them."

ACUTE POLIOMYELITIS.—One case was notified during the year.

TUBERCULOSIS.—This disease has been dealt with separately earlier in the report.

## (*b*) NON-NOTIFIABLE DISEASES.

MEASLES.—This disease ceased to be compulsorily notifiable in 1919, but a large proportion of the cases are brought to the notice of the Public Health Service by the visits of the health officials and attendance officers of the Education Department to the homes of the children. The following-up of such cases by the inspectors and health visitors bring to light many cases in children under School age. One death was reported during the year.

WHOOPING COUGH.—This disease is brought to the notice of the department through the same sources as other non-notifiable diseases. One death was reported, as against one in the preceding year.

INFLUENZA.—This disease is not compulsorily notifiable, apart from influenzal pneumonia. Influenza was registered as the cause of 9 deaths in 1937, as compared with 6 in 1936.

DISINFECTING AND CLEANSING STATION.—A disinfecting and cleansing station has been provided near the Public Health Office. It serves for Port as well as District work.

DISINFECTION.—During the year 242 houses were disinfected, also a large quantity of bedding and clothing at the Steam Disinfector.

# TABLE XXII.

## NOTIFIABLE DISEASES DURING THE YEAR.

| DISEASES. | Number of Cases Notified. | | | | | | | | | | | | | Cases removed to Hospital | No. of Cases Notified in each Ward. | | | | | | | Deaths. | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | At all Ages. | Under 1 year. | 1 to 2 | 2 to 3 | 3 to 4 | 4 to 5 | 5 to 10 | 10 to 15 | 15 to 20 | 20 to 35 | 35 to 45 | 45 to 65 | 65 Yearsand Upwards | | Cadoxton Ward | Castleland Ward | Court Ward | Holton Ward | High Street Ward | Park Ward | Dock Ward | At all Ages | Under 1 year | 1 to 2 | 2 to 3 | 3 to 4 | 4 to 5 | 5 to 10 | 10 to 15 | 15 to 20 | 20 to 35 | 35 to 45 | 45 to 65 | 65 Yearsand Upwards |
| Smallpox ... ... | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Scarlet Fever ... | 73 | — | 2 | 3 | 6 | 9 | 27 | 17 | 5 | 4 | — | — | — | 64 | 7 | 19 | 10 | 10 | 5 | 8 | 14 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Diphtheria .. | 127 | 1 | — | 4 | 9 | 9 | 64 | 29 | 8 | 3 | — | — | — | 121 | 27 | 21 | 21 | 20 | 8 | 18 | 12 | 5 | — | — | — | 1 | 2 | 2 | — | — | — | — | — | — |
| Enteric Fever ... | 3 | — | — | — | — | — | 1 | 2 | — | — | — | — | — | 3 | — | 1 | — | — | 1 | 1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Erysipelas ... | 20 | — | — | — | — | — | — | — | — | 2 | 6 | 6 | 6 | 2 | 3 | 4 | 3 | 9 | 1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Pneumonia ... | 48 | 2 | 3 | 6 | — | 2 | 7 | 1 | 2 | 5 | 4 | 8 | 8 | — | 7 | 7 | 10 | 5 | 6 | 3 | 10 | 32 | 6 | 4 | 1 | — | — | — | — | — | — | 2 | 6 | 13 |
| Malaria ... .. | 1 | — | — | — | — | — | — | — | — | 1 | — | — | — | — | — | 1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dysentery ... | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Ophthalmia-Neonatorum ... | 6 | 6 | — | — | — | — | — | — | — | — | — | — | — | — | 1 | — | 2 | — | 1 | 2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Pulmonary T.B. (Male) ... | 17 | — | — | — | — | — | — | — | — | 7 | 4 | 4 | 2 | — | 1 | 1 | 1 | 4 | 4 | 2 | 4 | 17 | — | — | — | — | — | — | — | 1 | 6 | 1 | 7 | 2 |
| Pulmonary T.B. (Fem.) .. | 31 | — | — | — | — | — | — | — | 9 | 10 | 6 | 4 | 2 | — | 9 | 6 | 3 | 5 | 2 | 3 | 3 | 13 | — | — | — | — | — | — | — | 1 | 5 | 3 | 2 | 2 |
| Other Forms T.B. (Male) ... | 7 | — | — | 1 | — | — | 1 | 1 | 1 | 1 | 1 | 1 | — | — | 3 | 1 | — | 1 | — | — | 2 | 3 | — | — | — | — | — | — | — | 2 | 1 | — | — | — |
| Other Forms T.B. (Fem.) ... | 7 | — | — | 1 | — | — | 1 | 1 | 1 | 2 | — | 1 | — | — | — | 4 | 1 | — | 1 | 1 | — | 3 | — | — | 1 | — | — | 1 | — | 1 | — | — | — | — |
| Acute Poliomyelitis | 1 | — | — | — | — | — | — | — | 1 | — | — | — | — | 1 | — | — | — | 1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Encephalitis Lethargica ... | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1 | — | — | — | — | — | — | — | — | — | — | — | 1 |
| Puerperal Pyrexia | 5 | — | — | — | — | — | — | — | — | 3 | 2 | — | — | 3 | 1 | — | — | 3 | 1 | — | — | 3 | — | — | — | — | — | — | — | — | 3 | — | — | — |
| Totals ... | 346 | 9 | 5 | 15 | 15 | 20 | 101 | 51 | 27 | 38 | 23 | 24 | 18 | 194 | 59 | 65 | 51 | 58 | 30 | 38 | 45 | 77 | 6 | 4 | 2 | 1 | 2 | 3 | — | 5 | 15 | 6 | 15 | 18 |

# BARRY PORT HEALTH AUTHORITY.

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Members:

ALL THE MEMBERS OF THE COUNCIL.

Clerk to Port Health Authority:

Mr. T. D. HOWELLS.

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## BARRY PORT HEALTH COMMITTEE.

Chairman: Mr. W. H. BUTCHER.

Mrs. M. HOLLAND.
Ald. Mrs. D. M. REES.
Mr. W. T. ACE, J.P.
Mr. D. J. BOON, J.P.
Mr. C. B. GRIFFITHS, O.B.E.
Mr. DUDLEY HOWE, J.P.
Dr. P. W. KENT.
Mr. W. R. LEE, J.P.
Mr. F. A. SHARP.

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## PORT HEALTH STAFF.

Port Medical Officer:

E. I. DAVIES, M.B., B.S. (Lond.), M.R.C.S., L.R.C.P., D.P.H.

Deputy Port Medical Officer:

J. B. S. MORGAN, M.B., B.Ch., B.Sc. (Wales), L.R.C.P., M.R.C.S., D.P.H. *(Left 31/8/37).*
W. E. THOMAS, M.B., B.Ch., B.Sc. (Wales), L.R.C.P., M.R.C.S., D.P.H. *(Commenced 1/9/37).*

Inspectors.

D*x Chief Inspector: CHARLES HOCKLEY.
*x J. H. LEWIS.
W. J. HOPKINS.
c J. T. EVANS.

Rat Catcher: H. PROSSER.

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x Holds the Sanitary Inspector's Certificate granted by the Royal Sanitary Institute.

* Holds the Meat Inspector's Certificate granted by the Royal Sanitary Institute.

D Holds the Diploma of the Sanitary Inspector's Association.

c Holds the Sanitary Inspector's Certificate granted by the Sanitary Inspector's Association Examination Board.

*To the Chairman and Members of the Barry Port Health Authority.*

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present to you my third Annual Report upon the work of the Port Health Authority during 1937.

This work whilst little known to the general public, is however of vital importance from the standpoint of preventing the entrance of dangerous infectious disease into this Country. Fortunately, no case or suspected case of one of the five major diseases occurred during the year, and the amount of sickness landed from vessels was small. The total number of cases of transmissible disease landed being twenty-seven, of which eight were labelled Malaria, all of whom were removed to hospital.

As this disease is protean in its manifestations, a provisional diagnosis only can be made on board a ship. Experience of tropical disease shows that to clinch the diagnosis, a prolonged search of the blood picture is frequently required. A "touch of ague" is a convenient ailment complained of by persons who have travelled abroad. Before a definite label is given to the disease microscopical examination of the blood to discover the parasite in acute cases, and other variations from the normal picture in chronic cases is required. In each vessel instructions were given as to preventive measures against Malaria.

The Port Sanitary Regulations 1933, relating to the Deratisation of ships has reduced to an extraordinary degree the rat population compared with even ten years ago. The complete extermination of this rodent is an almost impossible task owing to the rate of re-production. Much has been accomplished, but the war against the rat must be continued.

In conclusion, I desire to thank the Chairman and Members of the Port Health Authority for the courtesy with which they have considered my suggestions and recommendations, also my sincere thanks to the Chief Inspector, Mr. Charles Hockley, who has furnished me with the necessary figures on which this Report is based.

Your obedient servant,

E. I. DAVIES,
*Port Medical Officer.*

# PORT HEALTH AUTHORITY OF BARRY.

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## REPORT FOR THE YEAR 1937

BY THE

## PORT MEDICAL OFFICER.

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This is the 49th Annual Report on the work of the Barry Port Health Authority.

The Report covers the work of the Authority during the year and is prepared on the lines indicated in the Memoradum 204/SA issued by the Ministry of Health to Port Health Authorities.

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### JURISDICTION OF THE PORT.

The limits of jurisdiction of the Port Health Authority are as follows:—

> "A straight line drawn due South from the seaward extremity of the common boundary of the Parishes of Sully and Lavernock, and to the boundary of the said port, a straight line drawn due South from the seaward extremity of the common boundary of the Parishes of St. Athans and Llantwit Major, to the boundary of the said port, and a line co-incident with that part of the boundary of the said port which lies between the points at which the straight line hereinbefore mentioned meet such boundary together with the waters of the said port of Cardiff within such limits, and the place or places for the time being appointed as the Customs Boarding Station or Stations for such part of the said port, and every place for time being for the mooring and anchoring of ships for such part of the said port, under regulations for the prevention of the spread of diseases issued under the authority of the Statutes in that behalf, and the docks, basins, harbours, creeks, rivers, channels, roads, bays, and streams belonging to such part of the said port."

The contributing Riparian Authorities are the Cardiff Rural District Council, and the Cowbridge Rural District Council. The boundary of the district therefore extends from a point at Swanbridge immediately opposite the eastern side of Sully Island to a point approximately one mile West of the Leys. The latter position is known as Penry Bay.

The Medical Officer to the Port Health Authority desires to express his appreciation for the assistance received from H.M. Customs Officers, the Officers of the Great Western Railway Docks Authorities, the Harbour Master and the Pilots, who have co-operated in the maintenance of Public Health and the prevention of disease in the port.

E. I. DAVIES,
*Port Medical Officer,*
*Port Health Authority.*

APRIL, 1938.

TABLE A shows the amount of shipping entering the port during the year 1937. It will be noted that there was a considerable increase in the total number of vessels dealt with, both in number and tonnage.

|  | Number. | Tonnage. | Number Inspected. |  | No. reported to be defective. | No. of vessels on which defects were remedied | No. of Vessels Reported as having, or having had during the Voyage Infectious Disease on Board. |
|---|---|---|---|---|---|---|---|
|  |  |  | By the Medical Officer of Health. | By the Sanitary Inspector. |  |  |  |
| FOREIGN.— |  |  |  |  |  |  |  |
| Steamers .... | 1,066 | 1,377,990 | 31 | 1,066 | 244 | 244 | 6 |
| xMotors .... | 10 | 39,248 | 1 | 10 | 2 | 2 | — |
| Sailing .... | 2 | 4,632 | — | 2 | 1 | 1 | — |
| Fishing .... | — | — | — | — | — | — | — |
| Total Foreign | 1,078 | 1,421,870 | 32 | 1,078 | 247 | 247 | 6 |
| COASTWISE.— |  |  |  |  |  |  |  |
| Steamers .... | 2,712 | 2,165,475 | 9 | 1,984 | 201 | 201 | 16 |
| xMotors .... | 61 | 11,820 | 1 | 61 | 6 | 6 | — |
| Sailing .... | 9 | 304 | — | 9 | — | — | — |
| Fishing .... | — | — | — | — | — | — | — |
| Total Coastwise | 2,782 | 2,177,599 | 10 | 2,054 | 207 | 207 | 16 |
| Total Foreign and Coastwise | 3,860 | 3,599,469 | 42 | 3,132 | 454 | 454 | 22 |

**x** Includes mechanically propelled vessels other than steamers.

## TABLE II.—Ships Inspected during 1937.

Table II shows the nationality of ships inspected during the year, and it will be seen that approximately two-thirds are British ships, the remainder being vessels of all nationalities, the highest proportion of which are French, followed mainly by Norwegian, Greek, and Esthonian. Therefore, all sorts and conditions of ship construction and sanitary arrangements are met with at the Port of Barry. This adds considerable difficulty in dealing with ship sanitation. The instructions issued by the Board of Trade in regard to the Survey of Master and Crew Spaces apply only to British ships, so that no structural alterations can be enforced on Foreign owned vessels.

| Nationality. | Motor and Steam. | Sail. | Total. |
|---|---|---|---|
| Belgian .... .... .... | 22 | — | 22 |
| British .... .... .... | 2,005 | 10 | 2,015 |
| Chinese .... .... .... | 2 | — | 2 |
| Danish .... .... .... | 65 | — | 65 |
| Dutch .... .... .... | 19 | — | 19 |
| Egyptian .... .... .... | 4 | — | 4 |
| Esthonian .... .... .... | 110 | — | 110 |
| Finnish .... .... .... | 43 | 2 | 45 |
| French .... .... .... | 359 | — | 359 |
| German .... .... .... | 15 | — | 15 |
| Greek .... .... .... | 124 | — | 124 |
| Hungarian .... .... .... | 1 | — | 1 |
| Icelandic .... .... .... | 5 | — | 5 |
| Italian .... .... .... | 13 | — | 13 |
| Japanese .... .... .... | 4 | — | 4 |
| Latvian .... .... .... | 14 | — | 14 |
| Norwegian .... .... .... | 164 | — | 164 |
| Panama .... .... .... | 1 | — | 1 |
| Portuguese .... .... .... | 13 | — | 13 |
| Russian .... .... .... | 7 | — | 7 |
| Spanish .... .... .... | 43 | — | 43 |
| Swedish .... .... .... | 57 | — | 57 |
| Yugo-Slavian .... .... | 30 | — | 30 |
| Total .... .... .... | 3,120 | 12 | 3,132 |

## II.—CHARACTER OF TRADE OF PORT.

### TABLE III.

TABLE B.—(Ministry of Health).

*(a)* PASSENGER TRAFFIC DURING 1937.

| No. of Passengers. | 1st Class. | 2nd. Class. | 3rd Class. | Transmigrants. |
|---|---|---|---|---|
| Inwards .... | — | — | — | — |
| Outwards .... | — | — | — | — |

*(b)* CARGO TRAFFIC.

As in the case of Table A, Imports and Exports are considerably higher than the previous year. The high import being due to a large increase in pitwood and mining timber. The high export for 1937 was almost solely due to coal and coke, approximately 1½ million more tons of coal being exported.

The figures here given indicate the nature and amount of trade done.

The Imports and Exports for the years 1936 and 1937 are as follows:—

IMPORTS.

| | 1936. | | 1937. |
|---|---|---|---|
| Timber and Deals .... .... | 16,401 tons. | .... | 13,095 tons. |
| Pitwood and Mining Timber .... | 152,359 ,, | .... | 221,677 ,, |
| Grain and Flour .... .... .... | 144,537 ,, | .... | 145,113 ,, |
| Oil .... .... .... .... | 151 ,, | .... | 465 ,, |
| General Merchandise .... .... | 3,286 ,, | .... | 8,940 ,, |
| Building Sand .... .... .... | 4,694 ,, | .... | 16,350 ,, |
| Ballast .... .... .... .... | 1,450 ,, | .... | 2,200 ,, |
| Coal .... .... .... .... | — ,, | .... | — |
| Iron, Steel and Pig Iron .... .... | — ,, | .... | — |
| Total Imports .... .... | 322,878 tons. | .... | 407,840 tons. |

EXPORTS.

| | 1936. | | 1937. |
|---|---|---|---|
| Coal and Coke .... .... .... | 4,780,630 tons. | .... | 6,272,984 tons. |
| Tinplates .... .... .... | 6,281 ,, | .... | 3,309 ,, |
| Cement .... .... .... | 105,719 ,, | .... | 71,244 ,, |
| Grain and Flour .... .... .... | 33,843 ,, | .... | 33,366 ,, |
| Oil .... .... .... | 4,904 ,, | .... | 4,210 ,, |
| General Merchandise .... .... | 12,773 ,, | .... | 13,366 ,, |
| Ballast .... .... .... | 1,450 ,, | .... | 2,200 ,, |
| Patent Fuel .... .... .... | — ,, | .... | — |
| Iron and Steel Rails and Ironwork .... | 1,885 ,, | .... | 8,311 ,, |
| Total Exports .... .... | 4,947,485 tons. | .... | 6,408,990 tons. |
| Total Imports and Exports | 5,270,363 tons. | .... | 6,816,830 tons. |

Countries with which the Port principally Trades. The Port principally trades with France, Spain, Italy, Germany, Belgium, Scandinavia and the Mediterranean Ports; River Plate Ports and occasionally with India and Australia; London, Liverpool and other home ports.

## III. SOURCES OF WATER SUPPLY.

*(a)* For the Port. Drinking water is supplied by the town, an analysis of which can be seen under Sanitary Circumstances of Barry, under heading of Water Supply.

*(b)* For Shipping. The same supply as in *(a)* is used for shipping.

*(c)* Number of Water Boats and their Sanitary Condition. There are no water-boats in use in the Port.

Thirty-six samples of water were taken from ships supplied.

In each case where the water was found unsatisfactory the tanks were emptied and cleansed before taking a fresh supply of water on board.

### TABLE IV.

Results of Bacteriological Examinaton of Water Supplies from Ships.

| Number of Samples. | Satisfactory. | Moderate Purity. | Doubtful Purity. | Contaminated. |
|---|---|---|---|---|
| 36 | 27 | 7 | 2 | — |

## IV. PORT SANITARY REGULATIONS, 1933.

(1). Arrangements for dealing with Declarations of Health.

All Pilots immediately on boarding any foreign going vessel approaching the Port, shall hand the Master a form of declaration of Health (P.S.1.)

(2). Boarding of Vessels on Arrival.

Vessels arriving from infected ports or having infectious disease on board, are boarded by the Port Medical Officer or his Deputy and one of the Port Health Inspectors. All other vessels are boarded on arrival at the Lady Windsor Lock by one of the Port Health Inspectors.

(3). Notification to the Authority of Inward Vessels requiring Special Attention.

Pilots, and the Officers of H.M. Customs, are regularly supplied by the Port Health Authority with lists of ports where dangerous epidemic disease is known to exist.

(4). Mooring Stations designated under Article 10.

*(a)* Within the Docks.

The berth at No. 21 Buoys, No. 1 Dock is allocated as an internal mooring station but in the event of the berth being occupied, the Great Western Railway Co. will afford every facility at some other point within the Docks.

### (b) OUTSIDE THE DOCKS.

This matter was discussed with the Ministry of Health, H.M. Customs Chief Officer, The Harbour Master, a Senior Pilot, and the Port Medical Officer, and finally it was left to the discretion of the Medical Officer as to its suitability or otherwise.

### (5). PARTICULARS OF ANY STANDING EXEMPTIONS FROM THE PROVISIONS OF ARTICLE 14.

(1) Where a ship (whether a foreign-going or not) arrives in a district from a foreign port and it appears to the Customs Officer from answers to questions in a declaration of health or from answers to enquiries made by him or otherwise—

*(a)* that during the voyage (or, where the voyage has lasted more than six weeks, during the last six weeks) there has been on the ship a death from illness suspected to be of an infectious nature or a case of such illness; or

*(b)* that the ship has called at a port or seaboard included in the list referred to in Article 11; or

*(c)* that during the voyage (or, where the voyage has lasted more than six weeks, during the last six weeks) plague has occurred or been suspected amongst rats and mice on the ship or sickness or death not attributable to poison or other measures for destruction has occurred amongst the rats or mice on the ship.

he shall direct that the ship shall be taken to and detained at a mooring station unless the medical officer or other authorised officer of the sanitary authority otherwise allow.

(2) The medical officer may also direct that a ship arriving from a foreign port shall be detained for medical examination, and may hand a notice in writing to that effect to the customs officer who, if he is the first officer to visit the ship, shall deliver the notice to the master.

No Standing Exemption under this Article was issued during the year.

### (6). EXPERIENCE OF WORKING OF ARTICLE 16.

During the year in no case was it necessary to enforce the provisions of this Article.

### (7). ARRANGEMENTS FOR MEDICAL INSPECTION.

#### (a) PREMISES AND WAITING ROOMS.

Port Medical Officer's Office, Port Health Inspectors' Office.

#### (b) CLEANSING AND DISINFECTION.

The Port Health Officers undertake the disinfection of infected quarters, and infected bedding is removed to the Public Health Centre for steam disinfection.

Verminous persons are removed by ambulance to the Public Health Centre where they are bathed, and their clothing and other articles are disinfected by steam.

*(c)* Premises for the temporary accommodation of persons for whom such accommodation is required for the purposes of the Regulations. There is none.

*(d)* Hospital accommodation available for Plague, Cholera, Yellow Fever, Small Pox and other infectious diseases.

*(i) Cholera, Yellow Fever and Plague.*

Arrangements have been made for the treatment of persons suffering from Plague, Cholera, and Yellow Fever at the Council's Isolation Hospital, Weycock Road. This Hospital is also used for cases of Small Pox. No other types of infectious disease are dealt with at this Institution.

*(ii) Diphtheria and Scarlet Fever.*

Cases of Diphtheria and Scarlet Fever occurring in the Port are removed to the Infectious Diseases Hospital of the Barry Urban District Council.

*(iii) Small-pox and Chicken-pox.*

Cases of small-pox and chicken-pox occurring in the Port of Barry, are removed to the Small Pox Hospital of the Barry Urban District Council.

*(iv) Other Infectious Diseases.*

On account of the fact that there are no cubicle wards in the Barry Infectious Diseases Hospital, the Council have made arrangements with the Cardiff City Council to receive patients suffering from diseases of the enteric group, cerebro-spinal meningitis, acute poliomyelitis, encephalitis lethargica, erysipelas, and meningitis other than tubercular.

The charge for these cases being based on the cost per patient day for each previous year. For 1937 this worked out at 9/7d. per patient day.

Other cases of infectious sickness landed from vessels, such as dysentery, malaria, influenza, pneumonia and measles are admitted to the Royal Hamadryad Seamen's Hospital, Cardiff.

Cases of scabies are treated at the Public Health Centre.

*(e)* AMBULANCE TRANSPORT.

A motor ambulance for Infectious Disease is provided by the Barry Urban District Council. A charge of 10/6 for removal of a case from the vessel to Hospital in the area, and for removal to hospital outside the Urban area a charge of 1/9d. per mile.

*(f)* SUPERVISION OF CONTACTS.

Contacts if allowed to remain on the ship are kept under daily observation by the Port Medical Officer. If after examination they are permitted to proceed to their own homes, their names and addresses are taken and notification is sent to the Medical Officer of Health of the district to which they are going.

(8). BACTERIOLOGICAL EXAMINATION OF:—

(1) Rats for Plague.
(2) Other bacteriological or pathological examinations.

This work is carried out at the Cardiff and County Public Health Laboratory, The Parade, Cardiff.

(9). TREATMENT OF VENEREAL DISEASE.

*Arrangements for the Detection and Treatment of Venereal Diseases amongst Seamen.*

Careful inquiry is always made of the responsible officers of ships relating to the possibility of cases of venereal disease amongst the crew, and leaflets with full directions are distributed to masters of vessels.

The following table gives details relating to treatment of Venereal Disease during the year.

SEAMEN TREATED AT VENEREAL DISEASES CLINIC, 1937.

| 1937. | Syphilis. | Soft Chancre. | Gonorrhoea. | Non-Venereal. | Totals. |
|---|---|---|---|---|---|
| CASES. | | | | | |
| Total .... .... | 54 | 4 | 40 | 5 | 103 |
| New .... .... | 28 | 2 | 19 | 5 | 54 |
| ATTENDANCES. | | | | | |
| Total .... .... | 357 | 9 | 319 | 10 | 695 |
| New .... .... | 125 | 7 | 89 | 10 | 231 |

# INFECTIOUS DISEASE.

## TABLE V.

### TABLE C. (Ministry of Health).

CASES OF INFECTIOUS SICKNESS LANDED FROM VESSELS, 1937.

| Disease. | Number of cases during 1937. | | No. of Vessels concerned. | Average No. of Cases for previous five years. |
|---|---|---|---|---|
| | Passengers. | Crew. | | |
| Erysipelas .... .... | — | 1 | 1 | 0.284 |
| Chicken Pox .... .... | — | — | — | 0.040 |
| Diphtheria .... .... | — | — | — | 0.121 |
| Dysentery .... .... | — | — | — | 0.204 |
| Enteric .... .... | — | — | — | 0.564 |
| Influenza .... .... | — | 9 | 6 | 1.919 |
| Malaria .... .... | — | 8 | 4 | 1.691 |
| Measles .... .... | — | 1 | 1 | 0.208 |
| Pneumonia .... .... | — | 1 | 1 | 0.411 |
| Tuberculosis .... .... | — | — | — | 1.06 |
| Venereal Disease .... .... | — | 6 | 2 | 1.459 |
| Scabies .... .... .... | — | 1 | 1 | 0.245 |

## TABLE VI.

### TABLE D. (Ministry of Health).

CASES OF INFECTIOUS SICKNESS OCCURRING ON VESSELS DURING THE VOYAGE, BUT DISPOSED OF PRIOR TO ARRIVAL.

| Disease. | Number of cases during 1937. | | No. of Vessels concerned. | Average No. of Cases for previous five years. |
|---|---|---|---|---|
| | Passengers. | Crew. | | |
| Enteric .... .... | — | 2 | 2 | 0.458 |
| Influenza .... .... | — | 1 | 1 | 0.773 |
| Malaria .... .... | — | 4 | 1 | 1.031 |
| Mumps .... .... | — | — | — | 0.081 |
| Plague .... .... | — | — | — | 0.071 |
| Pneumonia .... .... | — | 1 | 1 | 0.241 |
| Small Pox .... .... | — | — | — | 0.184 |
| Tuberculosis .... .... | — | — | — | 0.409 |
| Venereal Disease .... .... | — | — | — | 0.386 |
| Dysentery .... .... | — | — | — | 0.644 |
| Chicken Pox .... .... | — | 5 | 1 | 1.00 |

## V. MEASURES AGAINST RODENTS.

Detailed information regarding deratisation of ships, and methods of fumigation is given in my Report for 1936.

The figures relating to rat destruction, deratisation certificates, deratisation exemption certificates issued during the year can be found in Tables 10 and 11.

Measures of rat destruction on vessels during the year are given in Table 12.

Continuous measures against rat prevalence of premises in the vicinity of the docks, on quays, wharves, warehouses, etc., are carried out.

Investigation into the percentage of rat infested ships was carried out during the year, with the following results:—

| No. of times fumigated in 10 year period. | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Once ... ... ... | 5 | 7 | 28 | 159 | 148 | 181 | 138 | 154 | 108 | 85 | 125 |
| Twice ... ... ... | ... | ... | ... | 15 | 6 | 24 | 7 | 14 | 2 | 2 | 2 |
| Three or more times | ... | ... | ... | 3 | 3 | 3 | ... | 1 | ... | ... | ... |

In the case of vessels fumigated only once, it appears that these are vessels that call very infrequently at this port, and are therefore no criterion as to their rat state.

When more than one fumigation has been carried out, particularly in one year, I am of opinion that this can be laid down to several causes.

1. Convenient Rat Harbourages.—In the older ships, the structure is such that permanent rat harbourage exists in several parts of the vessel. Many of these vessels are still running and as is well known during the slump period in shipping, many were sold to foreign buyers, and little or or no effort has been made by these owners to bring the ships up to date by removing as far as practicable certain permanent rat harbourages, or by rat proofing.

2. Fumigations.—It is acknowledged that fumigations are not 100% certain, with the consequent result that breeding commences immediately fumigations are completed. Possibly a longer exposure and a repeat fumigation will bring a considerable improvement.

3. Cargoes.—It is obvious that the type of cargoes has much to do with the incidence of rats, and it does appear that where grain and such cargoes are shipped, rats are present in large numbers on land adjoining the wharves, so that a combination of numerous rats plus the opportunity of plenty of food lends itself to considerable rat infestation.

4. Cleanliness of Vessels.—Certain foreign vessels make a practice of carrying live animals, and the storage of hay and fodder lends itself to opportunities for rats to nest in the vicinity. In addition, very little care is taken to maintain a satisfactory standard of cleanliness in places where animals are kept.

General.—*(a)* In the case of new vessels, permanent rat harbourage does not exist to the same extent as in the older vessels, but there is still room for improvement, and I feel that the Board of Trade should exercise still more stringent measures in order to practically eliminate harbourages as they have already suggested.

On the other hand, it is of little value for this country to carry out such improvements as suggested, if the system is not internationally applied.

*(b)* Percentages.—The percentage of ships on which rats were recovered after fumigation, taking 10 yearly period, was 2.9%, the percentage of heavily infested ships being 0.79% (heavy infestation refers to ships where 40 rats or more were recovered).

Generally speaking it can be said that rats are more often discovered in vessels that are (a) traditionally dirty, (b) ships that carry yellow crews, and (c) ships where no messrooms are provided.

The percentages of rat infested vessels arriving from (a) foreign, and (b) coastwise, during the past seven years are as follows:—

| | |
|---|---|
| Vessels arriving from foreign.... .... .... | 9.29% |
| Vessels arriving coastwise .... .... .... | 0.57% |

## TABLE VII.

RATS DESTROYED DURING 1937. TABLE E. (Ministry of Health).

(1). ON VESSELS.

| Number of Rats. | Jan. | Feb. | March | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total in Year. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Black Rats ... | 262 | 129 | 339 | 401 | 10 | 230 | 302 | 142 | 442 | 163 | 358 | 216 | 2,994 |
| Brown Rats ... | — | 8 | — | — | — | — | — | — | 41 | 93 | — | 7 | 149 |
| Species not recorded | 16 | 17 | 4 | 8 | — | — | — | — | - | — | — | — | 45 |
| Rats examined ... | 28 | 24 | 52 | 44 | 7 | 19 | 41 | 24 | 54 | 40 | 22 | 30 | 385 |
| Rats infected with Plague ... | — | — | — | — | — | — | — | — | — | — | — | — | — |

## TABLE VIII.

TABLE F. (Ministry of Health).

(2). IN DOCKS, QUAYS, WHARVES AND WAREHOUSES.

| Number of Rats. | Jan. | Feb. | March | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total in Year. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Black Rats ... | 1 | 2 | 1 | — | — | 1 | — | — | 2 | — | 1 | — | 8 |
| Brown Rats ... | 3 | 7 | 8 | 10 | 5 | 16 | 4 | 2 | 14 | 5 | 6 | 11 | 91 |
| Species not recorded | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Rats examined ... | 1 | 3 | 3 | 4 | 2 | 12 | 3 | 2 | 8 | 5 | 5 | 2 | 50 |
| Rats infected with Plague ... | — | — | — | — | — | — | — | — | — | — | — | — | — |

## VI. HYGIENE OF CREWS' SPACES.

All ships are inspected by the Sanitary Inspectors of the Port Health Authority as soon as possible after berthing.

Inquiries are made as to the occurrence of any cases of sickness during the voyage, or if any member of the crew is at present sick or suffering from venereal disease; rat prevalence and rat mortality; the source of the water supply, cleansing of tank and bilges, and all matters affecting the health of the crew.

The living quarters are inspected, and in the event of any defects, notices are served requiring the necessary remedial work to be carried out.

There is still room for improvement of crews' living spaces in the average type of tramp steamers. The problem of living quarters for the crews is a difficult one, because the limited space available has to be utilised as fully as possible for economic reasons, nevertheless, it is pleasing to note that several shipowners have introduced extensive reforms in their new ships, showing new lines of development.

It has been stated that acceleration of the building of merchant vessels is urgently required. If so, the replacement of old ships by new ones built on the lines indicated in the recent Board of of Trade Instructions would alleviate the conditions under which the British seaman is expected to live and work. The observance of the rules of personal hygiene cannot be expected from the crew unless marked improvement of the facilities and environment for cleanliness are provided. The problem no doubt is mainly one of economics, resolving itself into the question of money, added weight, and more space.

## TABLE IX.

TABLE J. (Ministry of Health). CLASSIFICATION OF NUISANCES.

| Nationality of Vessels. | No. inspected during 1937. | Defects of original construction. | Structural Defects through wear and tear. | Dirt, Vermin and other conditions prejudicial to health. |
|---|---|---|---|---|
| British .... .... | 2,015 | — | 21 | 237 |
| Other Nations .... | 1,117 | — | 19 | 217 |

## VII. FOOD INSPECTION.

1.—ACTION TAKEN UNDER:—

The Public Health (Imported Food) Regulations, 1925-1933.
The Public Health (Imported Milk) Regulations, 1926.
The Public Health (Preservatives, etc., in Food) Regulations, 1927.

During the year 145,113 tons of grain as compared with 144,537 tons for 1936 were imported. (There were twenty-nine cargoes from foreign ports, and twenty-five from home ports). 20 tons 17 cwts. of grain was discovered unfit for milling and destroyed.

Considerable quantities of foreign and chilled meat which arrived by rail for storage in the Cold Stores were inspected during the year, and found to be in good condition.

No cargo of foreign or chilled meat was imported during the year.

2.—SHELLFISH.

There are no shellfish beds or layings within the jurisdiction of the Port Health Authority.

3.—NUMBER OF SAMPLES OF FOOD EXAMINED BY:—

(*a*) *Bacteriologist.*

Nature of Sample
Result of Examination } NIL.

(*b*) *Analyst.*

Nature of Sample
Result of Examination } NIL.

## VIII. OTHER INSPECTIONS.

(*a*) *Factories and Workshops.*

The Port Health Inspectors made frequent inspections of the sanitary conveniences on the dockside during the year. All nuisances discovered have been reported upon and the remedial work carried out. The conditions from a public health point of view are satisfactory.

(*b*) *Foreign Animals Orders* 1910-1919.

These orders prohibit the importation of animals into British home ports, scheduled ports, and countries, and also provide for the disinfection and cleansing of vessels on which animals are carried.

One hundred and eighty-three dogs, 116 cats, 1 sheep, 1 pig, 1 bear, 2 love-birds and 2 parrots were brought to the port on vessels.

*(c) (Parrots Prohibition of Import) Regulations,* 1930.

## PSITTACOSIS.

The Parrots (Prohibition of Imports) Regulations, 1930, are still in force, and during the year 1937, the number of orders issued was four.

The Port Health Authority enforce the Regulations, Sections 4 and 5 which state as follows—

SECTION 4. A person shall not import any † Parrot into England or Wales whether for sale or otherwise:

Provided that nothing in these regulations shall be deemed to prohibit the importation of any parrot which is proved to the satisfaction of the Port Medical Officer to be required for purposes of medical or veterinary research, or which is consigned to the Zoological Society of London or to a person for the time being specially authorised by the Minister (Health) to import parrots otherwise than for sale.

SECTION 5.

The master of every ship approaching any port shall, if he has reason to believe that a parrot is on board, bring these regulations to the notice of the person having the custody or control of the parrot, and shall immediately on the arrival of the ship notify the proper officer of Customs and Excise accordingly.

† "Parrot" means a bird of the order Psittaciformes, and includes any of the birds commonly called parrots, parrakeets, love-birds, macaws, cockatoos, conures, caiques, lories and lorikeets.

It is perhaps not generally realised that since the epidemic of 1930 died down, cases of Psittacosis have been occurring in this Country. Although the number of cases have not been many, it is significant that there should be any at all. The epidemic eight years ago was due to the introduction into this country of diseased birds from South America. This disease has been observed in the birds mentioned in the above order †, and is characterised by Enteritis and Scepticæmia. Psittacosis may be contracted by man from parrots and other Psittacide. In the human subject the disease is characterised by headache, fever, vomiting, diarrhoea and frequently broncho-pneumonia, and is accredited to infection from Avian sources. The above regulations therefore are important in order to minimise or exclude the risk of spread of the disease.

*(d) Dangerous Drugs Acts* 1920 *and* 1923.

Two certificates for supply of scheduled drugs under these Acts were issued during the year.

Finally, I append a short article on "Port Sanitation" which appeared under the heading National Health Campaign in the local press.

## PORT SANITATION.

Every port, or groups of neighbouring ports, are under the jurisdiction for purposes of health of a port sanitary authority, now re-named Port Health Authority under the Public Health Act, 1936. The whole of the coast line and the shores of navigable rivers in England and Wales are included in either a Port Sanitary District or a Riparian Sanitary District. These authorities are responsible for preventing the importation of infectious sickness from abroad, for supervision of the hygiene of ships lying within their district, for the inspection of imported food, and for the general sanitary administration of the area under their control.

In olden days, ships, their passengers and crew, coming from places that were believed to be infected with disease, were isolated for forty days and forty nights—hence the word quarantine. This precaution, no doubt, served to stay the march of pestilence and plague. To-day our precautions, although adequate are not so stringent. The earliest quarantine laws against plague date back as far as the year 1348, when this disease was present in epidemic form in Europe. The old system of quarantine however, imposed severe burdens on trade, and on crews and passengers of ships. With the advance of knowledge of epidemic diseases, the present day method replaced gradually the old system, commencing about the middle of the nineteenth century.

The present day methods depend mainly upon the fact that information relating to the prevalence of five deadly types of infectious disease throughout the world is collected by the Health Office of the League of Nations at Geneva and the Office International d'Hygiene Publique at Paris. This is circulated weekly to Port Health Authorities, thus enabling the Port Medical Officer to prepare a list of all ports both abroad and at home where there may be a case or cases of one of these diseases, viz.: Plague, Cholera, Yellow Fever, Typhus Fever and Small Pox. It is interesting to note that the Port Health Authority at Barry was constituted in the year 1893. The boundary of the district extends from a point at Swanbridge immediately opposite the eastern side of Sully Island to a point approximately one mile west of the Leys. The latter position is known as Penry Bay which is situated near an old Roman Camp, where at one time was found a pier for boarding vessels.

Incidentally, during the year 1893, a Cholera epidemic was spreading over the Continent of Europe, and fears were then entertained of its introduction into Barry owing to constant commercial intercourse with several continental sea-ports. Special precautions were taken to prevent the introduction of this disease into the port. Eventually in 1896 arrangements were made for the treatment of Cholera, Plague and Yellow Fever at the hospital on the Flat Holm. The Flat Holm hospital was discarded in 1936 as modern methods of isolation and segregation of these diseases proved its purpose obsolete and unnecessary.

Another disease which receives international attention is plague, and as it is by means of rats that bubonic plague is propagated, this rodent has received a prominent place in the International Sanitary Convention of Paris, 1926. As a result, vigorous action has been taken to reduce the rat population of all ships by fumigation with Hydrogen Cyanide or Sulphur Dioxide. Barry became a Scheduled Port under Article 28 of the International Convention in 1929. Statistics prove at Barry that the number of rats found in both British and foreign vessels calling at the port is only a small proportion of the number found ten years or more ago.

Whilst on this question of rats, I should like to point out that the campaign should also be conducted on shore, in stores, warehouses, and in private dwellings. The rats, both black and brown, should be attacked periodically and persistently, especially during their non-breeding season in the winter months. They should be destroyed by dogs and ferrets; by trapping; and by all sorts of poisons. The poison must be varied week by week. Rats get to know which poison gave their brothers the stomach-ache last week, so that changes should be rung on the poisons that are employed.

E. I. DAVIES,

*October, 1937.* M.B., B.S. (Lond.), D.P.H.

## TABLE X.

TABLE G. (MINISTRY OF HEALTH). *Measures of Rat Destruction on Plague "infected" or "suspected" Vessel or Vessels from plague infected ports arriving in the Port during the year.*

| Total Number of such Vessels arriving. 1. | Number of such Vessels fumigated by $SO_2$ 2. | Number of Rats killed. 3. | Number of such Vessels fumigated by HCN. 4. | Number of Rats killed. 5. | Number of such Vessels on which trapping, poisoning, &c., were employed. 6. | Number of Rats killed. 7. | Number of such Vessels on which measures of Rat destruction *were not carried out.* 8. |
|---|---|---|---|---|---|---|---|
| — | — | — | — | — | — | — | — |

## TABLE XI.

TABLE H.* (MINISTRY OF HEALTH). *Deratisation Certificates and Deratisation Exemption Certificates issued during the year.*

| NET TONNAGE. | No. of Ships. | NO. OF DERATISATION CERTIFICATES ISSUED. | | | | | No. of Deratisation Exemption Certificates Issued. | Total Certificates Issued. |
|---|---|---|---|---|---|---|---|---|
| | | After fumigation with | | | After Trapping, Poisoning, etc. | Total. | | |
| | | H.C.N. | Sulphur. | H.C.N. and Sulphur. | | | | |
| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. |
| Ships up to 300 tons .... .... | 9 | — | — | — | — | — | 9 | 9 |
| „ from 301 tons to 1,000 tons .... | 88 | — | 2 | — | — | 2 | 86 | 88 |
| „ from 1,001 „ 3,000 „ .... | 169 | 8 | 63 | — | — | 71 | 98 | 169 |
| „ from 3,001 „ 10,000 „ .... | 104 | 6 | 45 | — | — | 51 | 53 | 104 |
| , over 10,000 tons .... .... | — | — | — | — | — | — | — | — |
| TOTALS .... .... | 370 | 14 | 110 | — | — | 124 | 246 | 370 |

* Applicable only to those Ports approved by the Minister of Health for the issue of Deratisation Certificates and Deratisation Exemption Certificates in accordance with the provisions of Article 28 of the International Sanitary Convention, 1926. (Form Port 11).

## TABLE XII.

*Measures of Rat Destruction on Vessels during the year.*

| Number of Vessels fumigated by $SO_2$ 1. | Number of dead Rats recovered. 2. | Number of Vessels fumigated by HCN. 3. | Number of dead Rats recovered. 4. | Number of Vessels fumigated by HCN. and Sulphur. 5. | Number of dead Rats recovered. 6. | Number of Vessels on which trapping, poisoning, &c., were employed. 7. | Number of dead Rats recovered. 8. |
|---|---|---|---|---|---|---|---|
| 110 | 2,747 | 14 | 348 | — | — | 2 | 93 |

# SCHOOL MEDICAL SERVICE.

## 1. STAFF.

(*a*) MEDICAL.—The medical staff of the School Medical Service is composed of the following officials:—

(1) The Medical Officer of Health, who is also the School Medical Officer.

The Assistant School Medical Officer, who is also Deputy Medical Officer of Health.

The School Dentist, also Dentist for Maternity and Child Welfare.

Surgeon, Ear, Nose and Throat Clinic, also Surgeon to the Accident and Surgical Hospital.

(*b*) NURSING.—There are five School Nurses whose appointments are combined posts of Health Visitors and School Nurses. One third of their time is devoted to the School Medical Service and two thirds to Maternity and Child Welfare duties.

A Dental Nurse assists the School Dentist at the Dental Clinic.

(*c*) CLERICAL.—Two clerks are engaged in the clerical work relating to the medical inspection and treatment of school children.

## 2. SCHOOL BUILDINGS.

The schools generally are well built and ventilated, the lighting, heating, equipment and sanitation of high standard.

## 3. MEDICAL INSPECTION.

The numbers of children medically examined at routine and special inspections and re-inspections are classified in Table 1.

1,603 school children were examined at routine inspections, as compared with 1,580 in the year 1936. The number of children specially examined was 1,776, compared with 1,982 for the previous year. The number of re-inspections was 3,188 as compared with 3,433 for 1936.

## 4. FINDINGS OF MEDICAL INSPECTION.

Table IIA shows details of diseases and defects found at routine and special inspections to require treatment or to be kept under observation.

(*a*) Uncleanliness.—The number of cases of uncleanliness found on routine inspections has slightly increased.

Head.—4.11 per cent. of the children routinely inspected required treatment for abnormal conditions, being an increase of 0.13 per cent. as compared with last year.

Body.—2.99 per cent. of the children at the routine inspections required treatment for uncleanliness of the body, as compared with 2.40 for 1936.

*(b)* Minor Ailments.—These consist of cuts, sores, bruises, abcesses, colds, and indefinite illnesses not classified under subsequent headings. These cases form a large proportion of cases treated at the clinics, as detailed in the appended tables.

*(c)* Tonsils and Adenoids.—The number of cases shows a decrease as compared with last year. The routine inspections disclosed 4.8 per cent. of the children requiring operative treatment, as compared with 6.4 per cent. last year.

*(d)* Tuberculosis.—These cases were referred to the Tuberculosis Medical Officer; special cases were also submitted to him by the School Medical Officer, when in doubt. The Tuberculosis Medical Officer issued certificates of fitness to the School Medical Officer of children between the ages of 5 and 14 years. Copies of these certificates were forwarded to the attendance department and the schools concerned.

The number of cases of this disease shows a decrease as compared with the previous year. The total number of cases requiring treatment being 8. All of which were non-Pulmonary Tuberculosis.

*(e)* Skin Disease.

Ringworm.—0.00 per cent. of the routine examinations and 0.112 of the Special Cases, as compared with 0.00 and 0.00 respectively in 1936, were discovered to be suffering from ringworm of the scalp. This shows a slight increase in the number of cases.

The number of cases of ringworm of the body was 17, being 10 more than last year.

Scabies.—0.187 per cent. of the routine examinations and 4.89 of the special cases, as compared with 0.126 and 1.96 respectively in 1936, were discovered to be suffering from scabies. This shows a marked increase in the number of cases.

Impetigo.—0.29 per cent. and 4.6 per cent. of the routine and specials were referred for treatment. This shows a slight decrease on the previous year.

*(f)* External Eye Disease.—During the year 0.43 per cent. routine examinations and 5.4 per cent. special examinations were referred for treatment, as compared with 0.63 and 5.3 for 1936.

*(g)* Vision and Squint.—The number of cases of defective vision discovered on routine examination gives a percentage of 4.5 this shows an increase as compared with the previous year. The percentage of cases of defective vision amongst special cases is 6.8 and shows a slight decrease. Twenty-four cases of squint were found, compared with 28 of last year.

*(h)* Ear Disease and Hearing.—Hearing was defective in 0.00 per cent. routine and 0.28 of the special examinations. Middle Ear and other diseases of the ear show a decrease in number. Chronic Otorrhoea is still the commonest form of ear disease found amongst school children.

*(i)* Dental Defects.—The inspections under this group of defects show a slight increase on the previous year. This can be partly accounted for by the fact that conservative dental treatment is still sought for when it is too late. The refusal of dental treatment, however, by conservative measures is less evident than in former years.

Table IC shows that of the 1,432 school children routinely inspected in the three code groups, 164 or 11.45 per cent. were found to require treatment for disease or defects other than uncleanliness and dental diseases.

## 5. INFECTIOUS DISEASES.

During the year there was no necessity for taking action to close schools owing to an epidemic.

There were 53 cases of Scarlet Fever and 102 cases of Diphtheria amongst the school children. Of all the cases of these diseases notified in the district 72.6 per cent. of the Scarlet Fever cases and 80.3 per cent. of the Diphtheria cases were amongst children of school age.

## 6. FOLLOWING UP.

The arrangements for the following-up of children suffering from physical defects has been described in detail in previous reports.

During the year 859 visits were made by the school nurses to such cases as chicken pox, tuberculosis, infectious eye diseases, skin diseases,etc.

## 7. MEDICAL TREATMENT.

*(a)* Minor Ailments.—The figures relating to this subject are given in Table IV, Group I., and comparison with last year is generally satisfactory.

*(b)* Tonsils and Adenoids.—During the year 148 cases of enlarged tonsils and adenoids were operated on under the Authority's scheme at the Clinic.

*(c)* Tuberculosis.—Cases of tuberculosis or suspected cases are referred to the Tuberculosis Officer. The cases are then taken over by him for treatment, and detailed reports are sent by him to the School Medical Officer, including fitness for school or otherwise. If institutional treatment is required, the cases are admitted to one of the Welsh National Memorial Hospitals. When the cases have been completed as far as active treatment is concerned, observation of the cases is periodically carried out by the School Medical Officer.

Particulars of treatment of Tuberculosis have been included in Table XVII of the Report on Public Health Service.

*(d)* Skin Diseases.—A very large percentage of cases treated at the Clinic consists of skin conditions, such as infectious sores, scabies and inflammatory conditions of the skin.

It will be seen that during the year ninety cases of scabies were treated at the School Clinic, three of which were discovered at Routine Inspections, and referred for treatment, the remainder were cases found as a result of special inspections by the School Medical Officer. The vast majority of cases were from three schools, and on a close investigation by the Assistant School Medical Officer, it was found that over 50% of the cases were children of more than one in a family. The maximum number of cases in a family being six, followed by five, four, and in several instances three in the family. There were ten families with two cases in each.

Vigorous treatment was carried out by means of bathing and scrubbing with soft soap, followed by sulphur baths, and inunction with sulphur ointment. Detailed printed instructions in regard to both treatment of the case and clothing, and mode of spread were issued to the parents. Repeated treatment had to be carried out in most of the cases. The cause of this complaint being due to the human "itch" mite (Sarcoptes Scabiei), and it is evident from a study of its life history that the treatment is by no means an easy one. The occurrence of various allergic manifestations from sensitization to the protein of the "itch" mite should be stressed. Urticarial rashes may continue for weeks or even months after the original lesions have cleared up. Sulphur preparations kill only the adult and immature mites, the eggs are not affected, thus a second or even third treatment at fortnightly intervals are necessary to kill any young mites which may have developed from the eggs. The period of exclusion from school varied from two weeks up to two months.

Ringworm.—During the year arrangements were made with the Cardiff Education Authority for X-Ray treatment of ringworm, the charge being £2 2s. 0d. per completed case. Two cases of ringworm of the scalp received treatment under this Scheme.

*(e)* External Eye Disease.—The number of cases of this defect treated at the Special Clinic for diseases of the eye has decreased. The majority of cases being Blepharitis and Conjunctivitis.

*(f)* Vision.—The total number of children for whom spectacles were prescribed for defective vision shows a slight decrease over the previous year.

*(g)* Ear Diseases and Hearing.—The more difficult cases of ear disease and also cases of defective hearing are referred to the Aural Specialist at his weekly visit. These cases being seen by him at the Clinic.

*(h)* Dental Defects.—The average attendance per session for treatment was 12.1. Details of Dental Treatment are given in Group V of Table IV.

*(i)* Crippling Defects and Orthopædics.—During the year 49 elementary school children suffering from congenital and paralytic deformities received treatment at the Prince of Wales' Hospital, Cardiff, through the agency of the Neale Trust.

## 8. PHYSICAL TRAINING.

The Class Teachers carry out this work, and the syllabus issued by the Board has been closely followed. The playgrounds are very suitable for the instruction of children in exercises.

During the year no new playing fields have been acquired, but it is interesting to note that the new recreation ground near the Barry Island Station has been placed at the disposal of the Island School for general physical training during school hours, and for football and games at stated periods out of school hours.

In connection with the Physical Training and Recreation Act, 1937, a local Committee has been set up by the Education Committee to conduct a survey of the local facilities and needs of physical training. This Committee is composed of representatives of the local Education Authority and other organisations interested in physical training. This Committee is at present preparing a report for consideration, prior to its presentation to the Area Committee for Wales.

In conjunction with other Part III Authorities in Glamorgan, arrangements are being made with the Glamorgan County Council to unify the organisation of the work of physical training in the County. This will enable Barry to have the services of the part-time organisers.

## 9. PROVISION OF MEALS.

MILK IN SCHOOL SCHEME.—A detailed report on this subject appeared in my Annual Report for 1936. The number of children receiving milk on medical grounds for the year under review was 641, this figure shows a slight decrease compared with that of 1936. The number of children receiving milk paid for by parents was 2,236, therefore the total number of children taking advantage of this Scheme was 2,877. The percentage figure of children receiving milk is 55.4. This figure is above the average for England and Wales for the year ending March 31st, 1937.

As in previous years, the children of the Special School have been in receipt of dinner each day of attendance.

NUTRITION.—The problem of nutrition is one which has attracted a great deal of scientific research. Much literature has been published in relation to the question of the improvement in public health as the result of the study of this new science. Despite the improvement which has occurred in recent years, malnutrition, though varying in extent remains to-day a serious problem in all Countries. The relationship of the ill-balanced diet to certain deficiency diseases has been recognised for the past two centuries. These diseases are known in the scientific world by the name of "Avitaminoses." The fact that disease may result from the lack of minute amounts of certain specific substances in a diet adequate in caloric value, in protein content, and even in mineral salts, has only been revealed by the work of the last thirty years. The Vitamins are organic chemical compounds, each of which is entirely different from the others and each has a specific function which no other will perform. Normal growth and development depends upon an adequate supply of all. The commoner diseases due to a serious deficiency in any one of these vitamins are (1) the well known tropical disease called "Beriberi," (2) the less known chronic wasting disease known as "Pellagra," (3) Scurvy, for centuries the scourge of seamen on long voyages, during which their food consisted of salted meat and hard tack; in Infants, a special type occurs known as infantile scurvy or "Barlow's" disease, and finally, the more common and well known disease of infants called "Rickets"

The problem of an adequate and well balanced diet, therefore, is no simple matter, marked deficiency diseases are rarely met with to-day in civilised countries. On the other hand, vague symptoms of ill-health due to lack of one or more of the vitamins are more common than is generally recognised, so that the planning of school meals in proper balance requires careful arrangements.

Below is a table of specimen diets given at the three meal centres under the Education Authority:—

| | |
|---|---|
| Monday .... .... .... | Soup, Minced Meat, Vegetables, Mashed Potatoes.<br>Alternative—Faggots—one per child. |
| Tuesday .... .... .... | Liver, Sage and Onions, Beans, Potatoes,<br>Suet Pudding. |
| Wednesday .... .... .... | Cottage Pie, Beans, Potatoes.<br>Bread Pudding. |
| Thursday .... .... .... | Sausage, Potatoes, Beans.<br>Rice Pudding. |
| Friday .... .... .... | Soup, Meat.<br>Rice Pudding. |
| Saturday .... .... .... | Faggots, Peas.<br>Rice Pudding. |

NOTE.—In addition, bread is provided *ad lib.*, and in season, tomatoes and lettuce.

From the above menus it will be seen that they contain foods which are a good source of the known vitamins; if in addition the child takes advantage of milk at school, they get at least one square meal per day.

A study of Table B on the state of Nutrition of children inspected during the year under the headings as laid down by the Board of Education, shows that the normal nutritional state was found in 91.7% of children examined; in ten children or 0.62%, the nutrition was described as excellent; 120 children or 7.48% examined were classified as "C," i.e., slightly subnormal; and three children or 0.18% were classified as bad. It should be pointed out that this classification is based on clinical findings, and naturally varies to some extent according to the experience of the Medical Examiner. These figures compare very favourably with those throughout the Country generally. Malnutrition is by no means confined to the poorer section of the community, and is in many ways an unfortunate designation. When present in some families, it is due to a lack of knowledge of family catering and cooking. The aim of every housewife should be to prepare simple yet savoury and economical meals such as are mentioned in the above menus.

The necessity for the provision of meals for the children of poor families was slightly less than last year. During the year 388 children received 57,325 free meals at an average cost per head of 1.66d. for food only. Total cost per meal 4.89d.

## 10. SCHOOL BATHS.

None of the schools in the area have been provided with baths.

## 11. CO-OPERATION OF PARENTS.

The proportion of parents who attend the routine examinations is about 90 per cent.; the percentages of parents attending the Clinics may be estimated at 75 per cent.

## 12. CO-OPERATION OF TEACHERS.

As in past years, the School Medical Officer has had every assistance from the Teaching staff of the schools in medical inspection and treatment of school children.

## 13. CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS.

Where for any reason a child is excluded from school by the School Medical Officer, an exclusion certificate is given to the School Attendance Officer, and on the child being fit to return to school a return certificate is issued to the School Attendance Officer, who then follows up the case.

The average attendance for all schools during the school year was 90.25 per cent.

## 14. CO-OPERATION OF VOLUNTARY BODIES.

The Neale Trust have during the year granted the following benefits to the poor children of Barry:—

### FOOTGEAR.

| | |
|---|---|
| Boys .... .... .... .... .... .... .... | 22 |
| Girls .... .... .... .... .... .... .... | 19 |
| Total .... .... | 41 |

During Christmas Day, 1937, the meals of the poor children of the district supplied by the Education Committee were supplemented by provisions granted by the Trust. Over 200 children were fed.

## 15. EXCEPTIONAL CHILDREN.

In Tables III and IIIa will be found details of the exceptional children in the area.

## 16. NURSERY SCHOOLS.

The question of establishing Nursery Schools is under consideration. At the same time quite a number of children between the ages of three and five years are attending the Infant Departments of the Elementary Schools. It should be pointed out that the Education Act of 1921, authorises Local Education Authorities for elementary education to provide or aid Nursery Schools (including Nursery Classes) for children over two and under five years of age, whose attendance at such school is necessary or advisable for their physical or mental development. Day Nurseries, it will be remembered, are under the control of the Maternity and Child Welfare Authority. The Nursery Schools in this Country developed from the free Kindergartens for poor children that were established by Voluntary Agencies in several large towns during the last thirty years of the Nineteenth Century.

The chief differences between Nursery Schools and Nursery Classes are as follows:—

(a) Nursery Schools provide for children between two and five years, whereas in Nursery Classes the age admission is usually three to five.

(b) The provision of mid-day dinner is an important feature of Nursery School work, whereas in Nursery Classes children go home to the mid-day meal.

(c) The hours of opening in a Nursery Class conform to those of a public elementary school; the Nursery School provides a longer day.

(d) Medical inspection and treatment is more thorough and frequent in a Nursery School.

(e) The Nursery School is as a rule a detached unit, whereas the Nursery Class forms part of the infants' department.

In Barry the classes in the infants' departments which admit children under five years of age carry out, to a large extent, the functions of a Nursery Class. The number of entrants which fall under this category is 218 for the year 1937.

## 17. SECONDARY SCHOOLS.

There are in the town two Secondary Schools (one for boys and one for girls) belonging to the Glamorgan County Council.

There is also a Ladies' Training College with accommodation for 120 students.

The medical inspection of the students attending the County School is carried out by the School Medical Staff of the County Council.

## 18. CONTINUATION SCHOOLS.

No arrangements have been made for the medical inspection of pupils in attendance at Continuation Schools.

## 19. EMPLOYMENT OF SCHOOL CHILDREN.

The Bye-laws regulating the employment of Children under the Education Act has added to the duties of the school medical service, inasmuch as no child of school age may now be engaged for wage-earning employment unless a health certificate, signed by the school medical officer, has been obtained.

## 20. SWIMMING INSTRUCTION.

Reference to the Public Open-air Sea Water Bathing Pool will be found in the general Public Health Section of this Report. This Swimming Pool is used by school children on eight half-days each week during the summer months. Each senior department is allocated approximately 1½ hours per week. Lessons on the "art of swimming" are given by an efficient swimming instructor, assisted by competent school teachers. 1,200 children took advantage of the opportunities provided and the total attendances of children amounted to 11,125 during the season. The Education Authority arranges for the free use of the baths and also provides conveyance for the children from schools which are distantly situated. The Head Teachers are agreed that considerable benefits have been derived by the children concerned. For the healthy child under suitable conditions swimming is one of the best forms of exercises that he can practice both in school days and subsequently.

Swimming is an art which must be learned. As with other physical activities there is good and bad technique. If a bad technique is adopted, there is a risk of converting this beneficial form of exercise into a harmful one. The swimming pool is a good example of an institution devised to improve Hygienic conditions, yet the device itself may be a Hygienic menace. Swimming pools in some cases may be nothing more or less than common "bath tubs." The growing popularity of swimming pools has led to an increased interest in the sanitary conditions that prevail in them. There is no longer any doubt that they can and sometimes do transmit disease. Accidents are also liable to take place. Hence a serious duty of supervision and responsibility arises.

Under modern standards of Hygiene the following procedure should be adopted:—

(1) Before entering the Bath, full showers with soap if necessary, should be insisted upon, foot baths especially should also be provided, and used. It is not widely realized that fungus infection of the feet may be contracted in swimming baths and the addition of a 1 per cent. Sodium Hypochlorite or 10—15% Sodium thio-sulphate solution to the foot baths has been recommended.

(2) Bathers should be instructed in pool sanitation, when water strikes a person's body the natural tendency is to "Urinate," so that lavatory accommodation should be easily seen and used prior to bathing.

(3) Children often swallow a considerable amount of the bath water which causes vomiting and this is usually vomited into the pool, so that Spitting basins or a channel situated just above the water level should be used for expectoration.

## TABLE A.

| Age. | Boys. | | | Girls. | | |
|---|---|---|---|---|---|---|
| | Number. | Height. Cms. | Weight. Kgrms. | Number. | Height. Cms. | Weight. Kgrms. |
| 3 | 8 | 101.0 | 15.8 | 15 | 97.4 | 14.8 |
| 4 | 106 | 101.9 | 16.3 | 108 | 101.6 | 15.8 |
| 5 | 86 | 106.4 | 17.2 | 69 | 105.6 | 17.9 |
| 6 | 28 | 109.8 | 18.8 | 33 | 111.9 | 19.4 |
| 7 | 26 | 118.3 | 22.9 | 26 | 117.5 | 20.8 |
| 8 | 213 | 122.2 | 24.6 | 218 | 121.3 | 22.4 |
| 9 | 18 | 127.8 | 26.7 | 15 | 126.9 | 25.7 |
| 10 | 22 | 135.9 | 31.5 | 18 | 131.5 | 27.8 |
| 11 | 18 | 139.9 | 32.2 | 28 | 136.4 | 30.9 |
| 12 | 245 | 144.0 | 34.6 | 263 | 141.7 | 33.5 |
| 13 | 14 | 149.1 | 37.4 | 17 | 148.3 | 36.2 |
| 14 | 3 | 152.0 | 40.3 | 6 | 149.0 | 39.6 |

## TABLE I.

## RETURN OF MEDICAL INSPECTIONS.

### A.—ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections—

| | |
|---|---|
| Entrants .... .... .... .... .... | 453 |
| Intermediates .... .... .... .... | 431 |
| Leavers .... .... .... .... .... | 548 |
| Total .... .... .... .... | 1,432 |
| Number of other Routine Inspections .... | 171 |
| Grand Total .... .... .... | 1,603 |

### B.—OTHER INSPECTIONS.

| | |
|---|---|
| Number of Special Inspections .... .... | 1,776 |
| Number of Re-Inspections .... .... .... | 3,188 |
| Total .... .... .... .... | 4,964 |

### C.—NUMBER OF *Individual Children* FOUND AT *Routine* MEDICAL INSPECTION TO REQUIRE TREATMENT (*Excluding* Defects of Nutrition, Uncleanliness and Dental Diseases).

| GROUP. (1). | For Defective Vision (excluding Squint) (2) | For all other conditions recorded. (3) | Total. (4) |
|---|---|---|---|
| Entrants .... .... .... .... .... | — | 55 | 55 |
| Second Age Group .... .... .... .... | 12 | 31 | 39 |
| Third Age Group .... .... .... .... | 35 | 39 | 70 |
| Total (Prescribed Groups) .... .... .... | 47 | 125 | 164 |
| Other Routine Inspections .... .... .... | 5 | 15 | 18 |
| Grand Total .... .... .... | 52 | 140 | 182 |

## TABLE II.

### A—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31ST DECEMBER, 1937.

| DEFECT OR DISEASE. | ROUTINE INSPECTIONS. | | SPECIAL INSPECTIONS. | |
|---|---|---|---|---|
| | No. of Defects. | | No. of Defects. | |
| 1 | Requiring Treatment. 2 | Requiring to be kept under observation but *not* requiring Treatment. 3 | Requiring Treatment. 4 | Requiring to be kept under observation but *not* requiring Treatment. 5 |
| SKIN— | | | | |
| Ringworm: | | | | |
| Scalp | — | — | 2 | — |
| Body | 1 | — | 16 | — |
| Scabies | 3 | — | 87 | — |
| Impetigo | 4 | — | 83 | — |
| Other Diseases (Non Tuberculous) | 8 | — | 179 | 6 |
| EYE— | | | | |
| Blepharitis | 5 | — | 21 | — |
| Conjunctivitis | 1 | — | 36 | — |
| Keratitis | — | — | 1 | — |
| Corneal Opacities | 1 | — | 7 | — |
| Defective Vision (excluding Squint) | 52 | 17 | 121 | 23 |
| Squint | 10 | 1 | 14 | 2 |
| Other Conditions | — | — | 31 | 1 |
| EAR— | | | | |
| Defective Hearing | — | — | 5 | — |
| Otitis Media | 2 | — | 74 | — |
| Other Ear Diseases | 3 | 3 | 69 | — |
| NOSE AND THROAT— | | | | |
| Enlarged Tonsils only | 46 | 197 | 65 | 8 |
| Adenoids only | — | 4 | 6 | 1 |
| Enlarged Tonsils and Adenoids | 31 | 28 | 36 | — |
| Other Conditions | 10 | 7 | 369 | 25 |
| Enlarged Cervical Glands (Non-Tuberculous) | 2 | 59 | 39 | — |
| Defective Speech | — | 7 | — | 1 |
| HEART AND CIRCULATION— | | | | |
| Heart Disease: | | | | |
| Organic | — | 3 | — | 1 |
| Functional | — | 24 | — | 9 |
| Anaemia | 12 | — | 17 | 26 |
| LUNGS— | | | | |
| Bronchitis | 6 | — | 18 | — |
| Other Non-Tuberculous Diseases | 1 | 45 | 122 | 6 |

| DEFECT OR DISEASE. | ROUTINE INSPECTIONS. | | SPECIAL INSPECTIONS. | |
|---|---|---|---|---|
| | No. of Defects. | | No. of Defects. | |
| | Requiring Treatment. | Requiring to be kept under observation but *not* requiring Treatment. | Requiring Treatment. | Requiring to be kept under observation but *not* requiring Treatment. |
| 1 | 2 | 3 | 4 | 5 |
| TUBERCULOSIS— | | | | |
| Pulmonary: | | | | |
| Definite | — | — | — | — |
| Suspected | — | — | — | — |
| Non-Pulmonary: | | | | |
| **Glands** | — | — | — | — |
| Other Bones and Joints | — | — | 2 | — |
| Skin | — | — | 1 | — |
| Other Forms | 3 | — | 2 | — |
| NERVOUS SYSTEM: | | | | |
| Epilepsy | — | — | — | — |
| Chorea | 1 | — | 7 | — |
| Other Conditions | — | — | 21 | 3 |
| DEFORMITIES: | | | | |
| Rickets | 3 | — | 1 | — |
| Spinal Curvature | — | 3 | 1 | — |
| Other Forms | 2 | 11 | 16 | 6 |
| Other Defects and Diseases | 17 | 18 | 346 | 18 |

## B.—CLASSIFICATION OF THE NUTRITION OF CHILDREN INSPECTED DURING THE YEAR IN THE ROUTINE AGE GROUPS.

| AGE-GROUPS. | Number of Children Inspected. | A. (Excellent). | | B. (Normal). | | C. (Slightly Subnormal). | | D. (Bad). | |
|---|---|---|---|---|---|---|---|---|---|
| | | No. | % | No. | % | No. | % | No. | % |
| Entrants | 453 | 3 | 0.66 | 405 | 89.40 | 44 | 9.71 | 1 | 0.22 |
| Second Age-group | 431 | 2 | 0.46 | 391 | 90.71 | 37 | 8.58 | 1 | 0.23 |
| Third Age-group | 548 | 3 | 0.54 | 520 | 94.84 | 24 | 4.37 | 1 | 0.18 |
| Other Routine Inspections | 171 | 2 | 1.16 | 154 | 90.04 | 15 | 8.77 | — | — |
| TOTAL | 1,603 | 10 | 0.62 | 1,470 | 91.70 | 120 | 7.48 | 3 | 0.18 |

# TABLE III.

## RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

| | | | Boys. | Girls. | Total. |
|---|---|---|---|---|---|
| Children suffering from the following types of Multiple Defect, *i.e.*, any combination of Total Blindness, Total Deafness, Mental Defect, Epilepsy, Active Tuberculosis, Crippling, or Heart Disease .... .... .... .... .... .... ....<br>The actual combination of defects and the type of School, indicated on a separate table .... | | | 2 | 3 | 5 |
| Blind (including partially blind). | *(i).* Suitable for training in a School for the blind. | At Certified Schools for the Blind .... | — | — | — |
| | | At Public Elementary Schools .... .... | — | — | — |
| | | At other Institutions .... .... .... | — | — | — |
| | | At no School or Institution .... .... | — | — | — |
| | *(ii).* Suitable for training in a School for the partially blind. | At Certified Schools for the Blind or Partially Blind .... .... .... | — | — | — |
| | | At Public Elementary Schools .... .... | 1 | 1 | 2 |
| | | At other Institutions .... .... .... | — | — | — |
| | | At no School or Institution .... .... | — | — | — |
| Deaf including deaf and dumb and partially deaf). | *(i).* Suitable for training in a School for the deaf. | At Certified Schools for the Deaf .... | — | — | — |
| | | At Public Elementary Schools .... .... | — | — | — |
| | | At other Institutions .... .... .... | — | — | — |
| | | At no School or Institution .... .... | — | — | — |
| | *(ii).* Suitable for training in a School for the partially deaf. | At Certified Schools for the Deaf or Partially Deaf .... .... .... | — | — | — |
| | | At Public Elementary Schools .... .... | — | — | — |
| | | At other Institutions .... .... .... | — | — | — |
| | | At no School or Institution .... .... | — | — | — |
| Mentally Defective. | Feebleminded. | At Certified Schools for Mentally Defective Children .... .... .... | — | — | — |
| | | At Public Elementary Schools .... .... | 14 | 6 | 20 |
| | | *At other Institutions .... .... .... | 1 | — | 1 |
| | | At no School or Institution .... .... | — | — | — |
| | Notified to the Local Mental Deficiency Authority *during the year.* | Details given on Form 307 M. | 1 | 1 | 2 |

* One boy attending a Private School.

## TABLE III—*continued.*

| | | | Boys. | Girls. | Total. |
|---|---|---|---|---|---|
| Epileptics. | Suffering from severe epilepsy. | At Certified Special Schools .... .... | — | — | — |
| | | At Public Elementary Schools .... | — | — | — |
| | | At other Institutions .... .... .... | — | — | — |
| | | At no School or Institution .... .... | — | — | — |
| Physically Defective. | Pulmonary tuberculosis (including pleura and intra-thoracic glands). | At Certified Special Schools .... .... | — | — | — |
| | | At Public Elementary Schools .... | 1 | 1 | 2 |
| | | At other Institutions .... .... .... | — | — | — |
| | | At no School or Institution .... .... | — | — | — |
| | Non-pulmonary tuberculosis. | At Certified Special Schools .... .... | — | — | — |
| | | At Public Elementary Schools .... | 7 | 3 | 10 |
| | | At other Institutions .... .... .... | — | 1 | 1 |
| | | At no School or Institution .... .... | — | 1 | 1 |
| | Delicate children. | At Certified Special Schools .... .... | — | — | — |
| | | At Public Elementary Schools .... | 67 | 41 | 108 |
| | | At other Institutions .... .... .... | — | — | — |
| | | At no School or Institution .... .... | — | — | — |
| | Crippled children. | At Certified Special Schools .... .... | — | 2 | 2 |
| | | At Public Elementary Schools .... | 25 | 26 | 51 |
| | | At other Institutions .... .... .... | — | — | — |
| | | At no School or Institution .... .... | 1 | 1 | 2 |
| | Heart Disease. | At Certified Special Schools .... .... | — | — | — |
| | | At Public Elementary Schools .... .... | 13 | 5 | 18 |
| | | At other Institutions .... .... .... | — | — | — |
| | | At no School or Institution .... .... | — | 1 | 1 |

## TABLE IIIA.

## RETURN OF CHILDREN SUFFERING FROM MULTIPLE DEFECTS

### YEAR ENDED 31ST DECEMBER, 1937.

| MULTIPLE DEFECTS. | SCHOOL OR INSTITUTION. | BOYS. | GIRLS. | TOTAL. |
|---|---|---|---|---|
| Feeble minded and severe Epilepsy .... .... | Attending Certified School for Mentally Defectives .... | — | 1 | 1 |
| Feeble minded and severe Epilepsy .... .... | At Institution .... .... | 2 | — | 2 |
| Severe Epilepsy and Tuberculosis of knee .... .... | ,, ,, .... .... .... | — | 1 | 1 |
| Feeble minded and Hemiplegia | Attending Certified School for Mentally Defectives .... | — | 1 | 1 |
| | Totals .... .... | 2 | 3 | 5 |

## TABLE IIIB (FORM 307M).

## MENTAL DEFICIENCY (NOTIFICATION OF CHILDREN) REGULATIONS, 1928.

---

STATEMENT OF THE NUMBER OF CHILDREN NOTIFIED DURING THE YEAR ENDED 31st DECEMBER, 1937, BY THE LOCAL EDUCATION AUTHORITY TO THE LOCAL MENTAL DEFICIENCY AUTHORITY.

| DIAGNOSIS. | BOYS. | GIRLS. |
|---|---|---|
| 1. (i) Children incapable of receiving benefit or further benefit from instruction in a Special School: | | |
| (*a*) Idiots .... .... .... .... | — | — |
| (*b*) Imbeciles .... .... .... .... | 1 | 1 |
| (*c*) Others .... .... .... .... | — | — |
| (ii) Children unable to be instructed in a Special School without detriment to the interests of other children: | | |
| (*a*) Moral Defectives .... .... .... | — | — |
| (*b*) Others .... .... .... .... | — | — |
| 2. Feeble-minded children notified on leaving a Special School on or before attaining the age of 16 .... .... | — | — |
| 3. Feeble-minded children notified under Article 3, *i.e.*, "special circumstances" cases .... .... .... | — | — |
| *Note.*—No child should be notified under Article 3 until the Board have issued a formal certificate (Form 308M) to the Authority. | | |
| 4. Children who in addition to being mentally defective were blind or deaf .... .... .... .... .... | — | — |
| *Note.*—No blind or deaf child should be notified without reference to the Board—see Article 2, proviso (ii). | | |
| GRAND TOTAL .... .... .... .... | 1 | 1 |

## TABLE IV.

### RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31ST DECEMBER, 1937.

### TREATMENT TABLE.

GROUP I.—MINOR AILMENTS (excluding Uncleanliness, for which see Group VI).

| Disease or Defect. (1). | Number of Defects treated, or under treatment during the year. Under the Authority's Scheme. (2). | Otherwise. (3). | Total. (4). |
|---|---|---|---|
| *Skin*— | | | |
| Ringworm—Scalp | 2 | — | 2 |
| Ringworm—Body | 17 | — | 17 |
| Scabies | 90 | — | 90 |
| Impetigo | 87 | — | 87 |
| Other Skin Disease | 182 | — | 182 |
| *Minor Eye Defects*<br>(External and other, but excluding cases falling in Group II.) | 97 | 2 | 99 |
| *Minor Ear Defects* | 148 | 1 | 149 |
| *Miscellaneous*<br>(*e.g.*, minor injuries, bruises, sores, chilblains, etc.) | 356 | — | 356 |
| Total | 979 | 3 | 982 |

GROUP II.—DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects treated as Minor Ailments—Group I).

| Defect or Disease. (1) | No. of Defects dealt with. | | | | No. of Children for whom spectacles were | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Prescribed (1) | | Obtained (2) | |
| | Under the Authority's Scheme (2) | By Private Practitioner or at Hospital, apart from the Authority's Scheme. (3) | Otherwise. (4) | Total. (5) | (i) Under the Authority's Scheme. | (ii) Otherwise. | (i) Under the Authority's Scheme. | (ii) Otherwise. |
| Errors of Refraction (including squint).<br>(Operations for squint should be recorded separately in the body of the School Medical Officer's Report). | 138 | 1 | — | 139 | 122 | 1 | 119 | 1 |
| Other Defect or Disease of the Eyes (excluding those recorded in Group I). | — | 1 | — | 1 | — | — | — | — |
| Total | 138 | 2 | — | 140 | 122 | 1 | 119 | 1 |

## GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

| NUMBER OF DEFECTS. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Received Operative Treatment. | | | | | | | | | | | | Received other forms of Treatment. | Total number treated. |
| Under the Authority's Scheme, in Clinic or Hospital (1) | | | | By Private Practitioner or Hospital, apart from the Authority's Scheme. (2) | | | | Total. (3) | | | | (4) | (5) |
| (i) | (ii) | (iii) | (iv) | (i) | (ii) | (iii) | (iv) | (i) | (ii) | (iii) | (iv) | | |
| — | — | 146 | 2 | — | — | 1 | — | — | — | 147 | 2 | 265 | 414 |

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and adenoids. (iv) Other defects of the nose and throat.

## TABLE IV.—*continued.*

## GROUP IV.—ORTHOPAEDIC AND POSTURAL DEFECTS.

| | Under the Authority's Scheme (1). | | | Otherwise. (2). | | | Total number treated |
|---|---|---|---|---|---|---|---|
| | Residential treatment with education. (i) | Residential treatment without education. (ii) | Non-residential treatment at an orthopaedic clinic. (iii) | Residential treatment with education. (i) | Residential treatment without education. (ii) | Non-residential treatment at an orthopaedic clinic. (iii) | |
| Number of children treated. | 2 | — | 47 | — | — | — | 49 |

### GROUP V.—DENTAL DEFECTS.

(1) Number of Children who were:—

(*a*) Inspected by the Dentist:

| | Aged: | | |
|---|---|---|---|
| Routine Age Groups | 5 | 269 | Total 2,570 |
| | 6 | 165 | |
| | 7 | 232 | |
| | 8 | 264 | |
| | 9 | 291 | |
| | 10 | 302 | |
| | 11 | 293 | |
| | 12 | 293 | |
| | 13 | 247 | |
| | 14 | 214 | |

| | |
|---|---|
| Specials .... .... .... | 1,525 |
| Grand Total .... .... | 4,095 |

| | |
|---|---|
| (*b*) Found to require treatment | 3,115 |
| (*c*) Actually treated .... .... | 2,322 |

(2) Half-days devoted to:—

| | |
|---|---|
| Inspection .... .... .... | 12 |
| Treatment .... .... .... | 377 |
| Total .... .... | 389 |

| | |
|---|---|
| (3) Attendances made by children for treatment .... .... | 4,596 |

(4) Fillings:—

| | |
|---|---|
| Permanent teeth .... .... | 1,461 |
| Temporary teeth .... .... | 116 |
| Total .... .... | 1,577 |

(5) Extractions:—

| | |
|---|---|
| Permanent teeth .... .... | 637 |
| Temporary teeth .... .... | 1,919 |
| Total .... .... | 2,556 |

| | |
|---|---|
| (6) Administrations of general anæsthetics for extractions .... | 1,097 |

(7) Other operations:—

| | |
|---|---|
| Permanent teeth .... .... | 459 |
| Temporary teeth .... .... | 257 |
| Total .... .... | 716 |

### GROUP VI.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

| | | |
|---|---|---|
| (i) | **Average number of** visits per School made during the year by the School Nurses.... | 8 |
| (ii) | Total number of examinations of children in the Schools by School Nurses .... | 20,795 |
| (iii) | Number of individual children found unclean .... .... .... .... .... | 498 |
| (iv) | Number of children cleansed under arrangements made by the Local Education Authority .... .... .... .... .... | — |
| (v) | Number of cases in which legal proceedings were taken:— | |
| | (*a*) Under the Education Act, 1921 .... .... .... .... | — |
| | (*b*) Under the School Attendance Bye-Laws .... .... .... | — |

I have the honour to be,

Your obedient servant,

E. I. DAVIES,
*School Medical Officer.*

HEALTH DEPARTMENT,
BARRY, *May, 1937.*

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